

MONDAY, MAY 15, 1871.

ORIGINAL LECTURES.

CLINICAL LECTURE

ON TWO CASES OF FACIAL PARALYSIS.—ONE WITH PARALYSIS OF THE UPPER LEFT SYMPATHETIC NERVES.

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GENTLEMEN:—It is well known that one of the nerves most apt to be affected with motor paralysis is the facial, or portio dura of the seventh pair, and, as was pointed out by Sir Charles Bell, this paralysis is of two forms,—one of which is centric, the other truncal, in its origin. I offer for your inspection to-day two cases of facial paralysis, illustrating both these varieties.

Case I.—Ann D., married, aged about 35. Symptoms, paralysis of left leg and arm, very nearly complete, with contraction of the muscles. Corner of the mouth drawn very slightly to the right side,—on smiling, very markedly so. She is not troubled by food collecting between her cheek and teeth. The left eye closes readily. The forehead wrinkles when she frowns. The pupil is natural.

Case II.—Joseph Eberle, æt. 57, Germany, widower, temperate, ropemaker, admitted November 29, 1870.

History.—In November, 1869, was taken with cough; since that time has lost much flesh. Has spit no blood.

Present Condition.—Right apex anteriorly, respiration rude; expiration prolonged; same posteriorly. Left apex, fine moist rales resembling crackling, but somewhat softer than usual. Percussion dull under left clavicle. Left apex posteriorly, no crackling. Sputum nummular, brown, and yellow. Strength is progressively failing.

January 13, 1871.—Sputum very much lessened. Troubled with dry cough at night.

February 4.—Five days ago, on waking in the morning, found he was paralyzed in the left side of the face. Puffiness in cheek was noticed on morning of above discovery. Has had an otorrheic discharge from left ear for six months.

Present condition.—Mouth drawn moderately to right side. Left side immovable when he laughs. Food collects in left cheek when eating. Perfect paralysis of left “orbicularis oculi.” No ptosis. Left pupil immovable, very much contracted. Forehead does not wrinkle when he frowns. No paralysis of muscles of mastication.

Some impairment of vision. Vessels of eye injected. Total loss of galvanic motor contractility in left side of face. Hearing abolished in left ear. Complaints of shooting pain in left eye. No impairment in facial sensibility. When asleep, the left eye rolls up in his head. No anæsthesia of eyebrow or face. Some twitching of flexors.

It is, of course, often of the utmost importance to distinguish whether a case of facial paralysis be centric or truncal; and, fortunately, there are two reliable diagnostic signs or symptoms. When the paralysis is truncal, according to Prof. Romberg, its completeness distinguishes it. The smooth forehead, the paralyzed orbicularis oculi, with the wide-open, staring, injected eye, the flabby pendent cheek, and the absolutely motionless corner of the mouth, are all seen in our Case II., but are absent in Case I., which is evidently centric, as part of a general right corpus striatum paralysis.

Again, it is well known that when muscles are paralyzed from disease of the nerve-centres, their galvanic-contractility remains for a very long time perfect, or nearly so; whereas, when the nerve-trunk is paralyzed, the galvano-contractility soon becomes totally

extinct. This loss of contractility is not, it is true, instantaneous, but gradual; yet it takes place so rapidly that by the sixth or seventh day the muscles have lost the power of responding to a galvanic current. I am now applying the galvanic test, and you see how in the one case (No. 1) the facial muscles, under the influence of a faradaic current, contract equally on both sides, whilst, in the other, on the affected side the strongest current only causes pain.

For the reasons just given, then, our diagnosis is so far made out in Case II. as Bell's or truncal paralysis of the facial nerves.

There are three chief forms of this disease, differing essentially in their cause and prognosis. The first includes such cases as come on suddenly after exposure to cold. Aroused by an alarm of fire, a man jumps suddenly out of bed, rushes to the window, opens it, and allows the cold north wind to chill him. The next morning he finds his face drawn. Or the same thing occurs after a long walk facing a cold wind. The second set of cases are those in which the paralysis is owing to pressure on the nerve from disease of the temporal bone. The third set are those where the nerve has been cut across, as during a surgical operation, or by a sabre-stroke.

The history of the case before us shows that it does not belong to the first or the last of these classes. The paralysis came on as the man was lying in bed in the warm ward, and there has been no wound of any kind. There is, however, a free purulent discharge from the ear, which is of long standing, and, taken with the evidently scrofulous diathesis of the patient, points to disease of the mastoid process of the temporal bone.

There is one symptom in the case to which I would call your especial attention,—namely, the pupil of the affected side is firmly contracted, and is immovable, or nearly so. I need not tell you that this is not directly connected with the facial paralysis, but must be owing to a lesion of some other nerve. There are three nerves which send filaments to the pupil,—namely, the oculomotor, the trigeminus, and the upper branches of the first cervical sympathetic ganglion. Of these the oculomotor supplies the circular fibres of the iris. When this nerve is irritated in the rabbit, dog, or cat, these fibres contract, and the pupil becomes small; when it is cut, they are paralyzed, and the pupil enlarges. The trigeminus and sympathetic nerves send their ultimate filaments to the radiating fibres, and, consequently, if these nerves are cut or paralyzed, contraction of the pupil results. There is still some obscurity hanging around the action of the fifth pair. I myself have cut it only in the rabbit, and in this animal section of the nerve is followed by anæsthesia of the cornea, with immediate marked contraction of the pupil, which, however, is not permanent, but yields after a period varying from six hours to as many days. In the dog and cat, according to both Marshall and Carpenter, division of this nerve is not followed by contraction of the pupil. In the present case the oculo-motor nerve is very plainly not concerned. Only under irritation could it cause contraction of the pupil; and it is hard to conceive how any irritation could be so persistent. Moreover, such irritation interferes with the other functions of the nerve, and there would be spasm or other evidence of deranged innervation in the upper eyelid.

The nerve involved must be either the fifth or the sympathetic.

The trigeminus is, as you all know, the nerve of general sensibility of the face and of motion for the masticatory muscles proper. There is in the present case no loss of facial sensibility, nor is there any paralysis of the muscles of mastication.

If, however, the first or ophthalmic branch of the tri-

facial were alone involved, it is conceivable that these functions might remain perfect and yet contraction of the pupil be present. There would be in such case, however, anaesthesia of the eyeball and brow, which is not present in the man before us. Moreover, the anatomical relations of the parts are such that there is no conceivable single lesion which could involve the facial nerve and the first branch of the fifth, and leave the main trunk of the latter nerve untouched. It is necessary, then, to exclude the trigeminus and to make the diagnosis that the contraction of the pupil is due to interference with the sympathetic nerve. The branches which go from the first cervical ganglion to the eye follow the vessels and form a plexus around the carotid artery as it passes through the carotid canal in the mastoid process of the temporal bone. Putting, then, these three facts together,—namely, prolonged suppurative discharge from the ear, paralysis both of the portio dura and portio mollis of the seventh pair, and paralysis of the sympathetic nerve,—I think there is sufficient ground for the diagnosis of very extensive disease of the temporal bone, involving the whole mastoid process. Unfortunately, no practical good, so far as treatment is concerned, can come out of this diagnosis, for the man is far advanced in pneumonic phthisis. It is very plain that no treatment can avail anything.

There is one practical point, however, which the diagnosis makes clear,—*i.e.* the prognosis. In order for both the nerves to be involved, it is very evident that the disease of the bone must be most extensive, and that the life of the patient is in imminent peril of being compromised by an extension of the inflammation to the membranes of the brain. Your prognosis in any such case is, therefore, very grave,—much graver than if the facial nerve were alone involved. Even in a man otherwise healthy, such lesions as must exist in this patient's temporal bone would authorize an almost fatal prognosis. At the very best, the life of such a subject must hang as it were upon a thread for months.

The subsequent history of the case fulfilled with unexpected rapidity the prognosis, and the post-mortem entirely corroborated the diagnosis. The following is the report:

February 9, A.M.—Same symptoms, save great increase in twitchings.

Feb. 9, P.M.—Received one-fortieth grain of atropia by hypodermic injection at 7 P.M. Right pupil now fully dilated; left slightly so,—not more than one-half larger than before administration of atropia.

February 10.—This morning discovered total paralysis in right side, more marked in upper extremities than lower. Is unconscious. Vacant stare from eyes. Nervous twitchings more violent.

February 11, A.M.—Unconscious, with wandering delirium. Constant twitchings, more marked on left side. Power of motion on right side returned.

February 13.—Still unconscious. Left side of face resumed its natural shape.

February 14.—Last night about ten o'clock he died.

Autopsy.—Vessels of arachnoid congested. Subarachnoid space, containing serous exudation, with some lymph both at base and vault.

Brain rather soft; everywhere congested, and contains apparently serum. Ventricles filled with serous fluid.

Petrous portion of left temporal bone necrosed, so that its end is destroyed, and above, the carotid canal is completely opened throughout its entire length. The top of the meatus auditorius is converted by necrosis into a sort of sieve; this continues along lower edge of petrous portion almost to carotid canal. The facial nerve is exposed just as it passes around the aqueductus Fallopii. Opening in carotid canal plugged up by a thick, gelatinous, almost cartilaginous exudation.

Lungs with small cavities at apices and advanced "cheesy deposit."

Left femur.—Head and neck, cancellated portions, trabeculae bluish; upper third, marrow yellowish, very dull car-

mine and Indian red in color; middle third mostly of a deep dull carmine red, resembling that of coagulated blood; lower third yellowish, interspersed with dull red spots; consistence of marrow fleshy; marrow composed chiefly of free fat and fat cells.

ORIGINAL COMMUNICATIONS.

ON THE PATHOLOGY, DIAGNOSIS, AND PROGNOSIS OF THE DIFFERENT FORMS OF BRIGHT'S DISEASE OF THE KIDNEY.

ILLUSTRATED BY SELECTED CASES.

(Concluded from No. 15.)

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B. CHRONICALLY-CONTRACTED KIDNEY.

SYNONYMS, *granular kidney, red granular kidney, chronic degenerative nephritis, gouty kidney, cirrhotic kidney, interstitial nephritis.*

FOR reasons already stated, we prefer to include the special form of contraction named by Basham the "gouty" kidney, under the general term contracted kidney; and if the word gouty is to be used at all, we would make it, as the late Dr. Todd has done, *synonymous* with contracted kidney, and not a subdivision of this form. Under any circumstances, the significance of the term is lost in this country, through the gradually increasing rarity of gout. In this condition the kidney is small,—often very small (we have seen such a kidney from an adult female scarcely larger than the thumb of the same individual). Here, too, we believe there is sufficient reason to admit *two modes of origin*. Most frequently the chronically-contracted kidney originates idiopathically, but occasionally, at least, it may be the result or continuation of acute inflammatory disease.

Pathological appearances.—Although undoubtedly small at the stage at which it is usually met, some allege that in its early stage the chronically-contracted kidney is congested, and therefore larger than natural. Its surface is rough and the capsule adherent, and when the latter is stripped off, portions of the secreting structure are often removed with it. In color it is sometimes red, and engorged vessels may be traced; hence the term red granular kidney. But it is often also pale in color. On section, it is noted that all portions are wasted, but the cortical or secreting portion much more markedly so. The Malpighian bodies are smaller, less numerous, and can scarcely be detected by the naked eye, while the small arteries are more prominent from thickening of their walls. The increased density and firmness of the organ are apparent. If the conditions occur in a gouty subject, the linear chalk-marks of urate of soda are noted, more particularly in the pyramids of straight tubules, and are contained within as well as between the tubules. Microscopically, four hundred diameters show us wasted and shrunken tubules, in places containing no epithelium; in other situations, the tubules may be tolerably perfect, and there is every gradation between these two conditions. Coexisting with these wasted tubules is a marked increase of the fibrous tissue or so-called stroma lying between them, and surrounding the Malpighian bodies. This so-called stroma, according to Drs. Johnson and Beale, does not exist in the young kidney, but gradually increases as portions of the secreting structure become useless and are converted into the fibrous intertubular substance. It is, however, at no time abundant in the normal condition, according to

these authors. So in wasting kidney, Dr. Beale asserts that the excess of fibrous tissue is not the result of inflammation of the stroma, as contended for by Virchow, Dickinson, and others, but results from the rapid destruction of the tubular structure. Others, as Hanfield Jones and Grainger Stewart, maintain that "the process may be from the first non-inflammatory, depending upon the exudation of blastema, tending abnormally to fibre-development, and not simply maintaining the nutrition of the part."*

Compelled, as we feel ourselves, as the result of some study of the minute anatomy of the kidney, to admit that the quantity of the connective tissue has been exaggerated, we hesitate to restrict the seat of the active changes resulting in contraction of the organ, to this element; in other words, to admit an interstitial nephritis. On the other hand, we are not satisfied that Dr. Beale has made good the ground he has taken with regard to the nature of cirrhosis of the kidney or liver. Is it not analogous to that pneumonitic process which results in a fibroid change of the proliferating bioplasm, having its origin not altogether nor mainly in the exact situation in which it is found, but in minute particles of germinal matter which have made their way through the blood-vessel walls and are originally derived from the white blood-corpuscles, rather than to that of the second form of pneumonia, which terminates in a cheesy or fatty change of the same original elements of inflammation, and to which the parenchymatous nephritis resulting in fatty degeneration is more closely allied?

More important practically, and not less interesting, are the *clinical history* and *diagnosis* of this form of Bright's disease, which is most insidious in its approach. Perhaps in the habitual drinker, in the gouty bon-vivant, or in a child after the acute Bright's disease of scarlatina, in an adult after acute nephritis from exposure, or in the overtaxed merchant or professional man, or even in those apparently free from any exhausting agency, the changes which constitute this disease may begin to take place. Of the symptoms, great *weakness*, manifested either primarily or in slow convalescence from any disease, is perhaps the first to attract attention, and to lead to an examination of the urine in the search to account for an unexplained condition; for dropsy does not generally present itself, and when it does, it is but slight, often noticeable only in the feet, and towards evening. Again, it passes away and does not recur. Many cases indeed occur in which there are absolutely no symptoms, not even a feeling of weakness, and yet an examination of the urine will show the elements indicative of the disease.

Attention being called to the urine, however, it is found perhaps more copious, of low specific gravity,—rarely above 1010,—and to contain albumen, but in exceedingly small amount; and indeed albumen is often temporarily wanting, as are also the casts presently to be described as characteristic. But although the albumen and casts thus disappear, they never remain permanently absent.

The casts which are characteristic of this form are not numerous. They are hyaline or granular. The hyaline are usually empty, but occasionally a single or perhaps two oil-drops will be seen glistening through the transparent structure of the tube, and a few oil-globules will be also noted floating free in the field. Occasionally, too, a fragment of epithelium is seen occupying a place in the cast.

These conditions, as intimated, may exist for years undetected, and drowsiness, soon followed by coma, may supervene before the disease is suspected. This is, moreover, a form of chronic Bright's disease in which

urea is particularly apt to be retained; and death is more apt to occur with coma and convulsions in this than in any other form, except, perhaps, the acute. There may be at the same time attendant cirrhosis of the liver, and occasionally epistaxis also occurs.

This is the affection of the kidney in which we have most commonly structural changes in the *retina*, accompanied by defective vision. In addition to the sudden blindness which may occur in uræmia, and which generally passes away as quickly as it came, we have the gradual impairment of vision from retinitis. The first effect of these changes is a mistiness, and a capacity of seeing objects more distinctly when held to one side. This is owing to the fact that the region of the yellow spot is generally affected. The first organic change is said to be a distention of the vessels of the retina with blood. Ecchymoses and hemorrhage follow, according to Liebreich, in the inner layer of the retina, producing a striated appearance. Finally, we have fatty degeneration and opacity. In addition, more especially in advanced disease, yellowish-white spots are discernible with the ophthalmoscope, which may result from transformation of extravasated blood, red in the first instance.

Another common attendant and resultant of this form of disease, and present therefore in advanced stages, is *hypertrophy of the heart*, undoubtedly due in part to the resistance which the blood meets in its passage through the constricted organ, but which is perhaps also contributed to by the poverty of the blood. It usually evinces itself by physical signs, sometimes by reduplication of the first sound, as in two cases reported by Dr. Sibson in the *British Medical Journal* for April 1, 1871, p. 338. The reduplication is attributed by this gentleman, and apparently justly, to a want of synchronism in the ventricular systole.

The *prognosis* requires great caution, because our patient may live, with appropriate care and treatment, many years, while exposure to cold and wet, or even fatigue, may be attended by the development of symptoms which speedily result in death. If the pregnant state supervene upon this condition, the woman is placed in great danger. She will almost inevitably have convulsions before or during her confinement. The diagnosis having been carefully arrived at, the safest course of the physician is to state the exact truth to his patient, which is generally this: "With the greatest care in avoiding exposure, wet, and fatigue, you will probably live and enjoy life many years, but neglect of these precautions may result disastrously in a few hours."

The following cases are illustrative of the mode of origin and cause:—

A gentleman, aged fifty, wealthy, but deeply engaged in mercantile pursuits, had occasionally felt vaguely unwell, but put off the rest which he thought would at once revive him. Finally, he sought medical advice. A specimen of urine was sent me for examination. It contained a small quantity of albumen and a few hyaline casts, containing an occasional oil-drop. In the course of a few days convulsions and coma supervened, and he died within two weeks from the time our attention was called to his condition.

Here the condition had existed probably many years. Had it been earlier recognized, and the advice of a physician taken, his life might have been longer extended.

The following case is interesting in that it illustrates the duration, as well as the occasional trifling effect on the general health of the patient, and in that it is at present, and likely to be for some time, under observation.

Mr. F., aged thirty-five, thinks that in 1855 he over-exerted himself by heavy lifting, after which, for four years, he was scarcely able to work. He contracted gonorrhœa in 1863, which became a "gleet," and continued until November, 1865.

* G. Stewart, "Bright's Diseases," p. 110.

In September, 1865, he noticed general swelling, for which he consulted a physician in the following November, and was told he had Bright's disease of the kidneys. A dose of calomel was also administered, and acted powerfully. He arose in the night, voided his bowels in the open air *en deshabilité*, and the next day had an attack of orchitis. In April, 1866, he passed under the care of my friend Dr. Cleaver, of Philadelphia, Pa., to whom I am indebted for the facts of these notes. The doctor found his urine with a sp. gr. of 1015 to 1020, and furnishing a precipitate of albumen equal to three-fourths the bulk of the fluid tested. No microscopic examination was made. At this time his dropsy was immense; his abdomen fluctuated as he walked, and the entire phalanx of a finger could be thrust into any portion of his lower limbs. He was ordered tincture of the chloride of iron, with a generous diet. He was also dry- and wet-cupped in the lumbar region, with relief to a pain of which he had constantly complained since the injury to his back. The chloride of iron acted as a diuretic as well as a chalybeate in his case, and in six weeks the anasarca had quite passed away, and the albumen diminished to one-twelfth of the bulk of urine tested.

A small quantity of albumen persistently remained. The man felt scarcely indisposed, but was aware of the presence of the albumen, and was anxious to get rid of it. In the summer of 1867 his physician sent him to me. He had the aspect of one in perfect health. There was no dropsy, and he said he did not feel otherwise than healthy, except that at times perhaps he felt a little weak; but stated also that if it were not for the albumen in his urine, which he was in the habit of testing himself, he would not believe that he was ill. His urine was pale, deposited a very minute quantity of albumen on the application of the usual tests, and contained typical hyaline casts, in some of which a drop or two of oil were present, while a few free oil-drops were also noted. I had little doubt of the condition of his kidneys, but conferred with Dr. Da Costa, of this city, who also examined the urine and concurred in the conclusion arrived at,—the existence of a chronically-contracted kidney. Since then he has taken little medicine, has continued to attend to his business, does not complain of being ill. He has had a second gleet, and Dr. C. informs me that he has been dilating a stricture successfully. On September 1, 1870, there was a slight deposit of albumen, just filling the convexity of the test-tube, and a very few hyaline casts were found. Reaction acid; sp. gr. 1024.

An interesting question with regard to this case is that of the exact date of the onset of the malady. Injuries to the back, such as that described, rarely produce renal disease, and, although there is room for considerable doubt, we should be inclined to believe that the disease began later than 1855, though the patient is himself disposed to date it from that time. Since he was in the army subsequently to 1860, we do not think it reasonable to date the disease prior to 1862; so that he may be said to have been the subject of the malady about nine years.

The following case illustrates well the insidious approach of the chronically-contracted kidney, but particularly the changes which result from an improvement, which must not be allowed to mislead us into a too favorable prognosis:

Lizzie T., aged twenty-one, an intelligent girl of Irish nativity, came under my notice in the summer of 1868 with typhoid fever, slow convalescence, and recovery; but she never became so robust as she was when she first came to this country in 1867. Between this date and the spring of 1870 she consulted me on one or two occasions, and during the warm season of 1869 was for some weeks quite feeble, but continued at her post in the store of her aunt, and after a few weeks in the country returned unusually well, remaining thus until February, 1870, when I treated her for an ordinary attack of bronchitis. Her slow convalescence from this attack and persistent weakness excited my concern, and led to an examination of her urine, which was found to be slightly albuminous, and to contain granular and hyaline tube-casts. There was no edema, and the only symptom of which she complained was weakness. She was placed upon acetate of iron

with quinine. The acetate of iron was, however, soon substituted by infusion of quassia with the tincture of the chloride of iron, under which she rapidly improved, and in the course of a month or six weeks was as well as previous to her catarrhal attack. *Albumen and tube-casts had both disappeared.*

On July 28 the weather was very hot, and I learned that her appetite, which had been so good, had again failed. An examination of her urine revealed again the presence of albumen more copiously than previously to its disappearance (about one-sixth of the bulk of urine tested), accompanied by granular and hyaline casts of large size. The iron and quassia were again ordered, and the patient urged to hasten the visit to the country for which she was preparing.

On August 24 her urine contained neither albumen nor casts. Her health was much improved, and she had gained five pounds in weight.

She remained in good health until February 10, 1871, when she again took cold, and had a similar attack of bronchitis, with asthma. During the autumn of 1870, the urine contained neither albumen nor casts, but in February, 1871, it had become slightly albuminous, and contained granular and hyaline casts. She again felt markedly weak, was without appetite, and lost some flesh. At this time, however (May 4), she is much better, and the urine is without albumen or casts.

C. THE LARDACEOUS OR ALBUMINOID KIDNEY.

SYNONYMS.—*Amyloid disease, waxy kidney, depurative disease.*

This is a condition in which the elements of the organ are gradually substituted by a peculiar albuminoid substance of acid reaction, usually described as glistening, resembling molten wax or boiled starch to the naked eye, but which is best recognized by its striking a deep mahogany red instead of the ordinary yellow with a solution of iodine.* Occasionally only, the further addition of sulphuric acid produces a blue color similar to the reaction of starch; hence the term amyloid disease, applied by Virchow.

Pathology.—The change begins in the blood-vessels, according to Stewart and Beale primarily affecting the capillaries of the Malpighian body, and extending thence to the middle or muscular coat of the small arteries. According to Dickinson, however, it begins in the arterioles. The vessels of either the convoluted or straight portions, or both, may be the seat of primary invasion, but it rapidly extends over the entire organ. The changes in the kidney up to this point are scarcely appreciable to the unaided eye, and would readily escape the inexperienced, since the exterior, size, weight, and color are normal. In section, a simple lens might show increased size and translucency of the Malpighian bodies; but iodine is more useful than the microscope. The change is best studied by first treating with iodine, and subsequently examining microscopically with a low power,—say fifty diameters.

Soon, however, the glistening matter extends beyond the muscular coat of the arteries, both within and without it, producing a more palpable thickening and diminished calibre. Then it proceeds beyond the vessels. The tubules also become involved, chiefly by the exudation into their interior of a glistening material which both Grainger Stewart and Beale represent as not usually exhibiting the peculiar reaction of the albuminoid substance, while Dickinson asserts that it does occasionally exhibit such reaction. It is this substance which produces the casts found in this disease, with regard to which the same difference of opinion exists, Stewart alleging that he has "never seen the casts present the peculiar reaction with iodine," though he has "occasionally seen appearances somewhat like it." Can it be that this substance, which it would seem must be the same in the cavity of the tubules as in the walls of the

* A solution containing one part tr. iodine, one part alcohol, and two of water is suitable.

vessels, exhibits different properties when free, and forming casts, as in the former, from what it does when infiltrating, as in the latter? The fact that the basement membrane never exhibits the reaction, as alleged also by Stewart, need not invalidate this supposition, since, on account of its extreme tenuity, it probably cannot hold the exuded substance, but allows it to transude.

As the result of the increased deposition, however, more marked changes are presented in the organs.

1. They are larger and heavier, though the capsule strips off as in health. The surface may be paler.
2. On section, a relatively increased extent of the convoluted substance is noted; it is also pale or yellowish, bacon-like, and firm, and exhibits more markedly the peculiar translucency referred to, and the Malpighian bodies are now seen more distinctly exhibiting the change. The pyramids of the straight tubes, perhaps by contrast alone, appear pinkish in hue.

Microscopically, by a low power (forty to fifty diameters) more satisfactorily than by a high one, a somewhat peculiar, highly-refracting transparency is noted in the vessels and tubules; but here, too, the study is best made by iodine. By this means, in connection with the microscope, the tubes will be seen increased relatively in calibre, in consequence of the distention by the exuded substance. By a higher power (three hundred diameters) the cells, according to Beale, are "usually much reduced in size," "for the most part wasted, smaller than natural." According to Grainger Stewart, however, the secreting cells present "the swollen, dimly translucent appearance;" but according to both of these authors, they cannot be said to be infiltrated with the amyloid substance, as the liver-cell is in the same disease, and the peculiar reaction is wanting. Dickinson and others, however, contend that the cells are also the seat of the change. The discrepancy between Beale and Stewart we believe reconciled by the fact that both conditions of cells present themselves. Some are evidently shrivelled, while others may be said to be swollen. The cells also occasionally contain globular and granular fat, while the same substance is occasionally found in the intertubular tissue.

Finally, according to Stewart, the stage of atrophy is reached, in which, he says, "the organ is reduced in bulk and weight. The capsule may be torn off without much difficulty. The surface is uneven, rough, and granular, of a pale, waxy color, but also occasionally mottled here and there with sebaceous-looking material. On section, the cortical substance is found much diminished, while the cones are nearly natural. The Malpighian bodies are large, prominent, closely grouped together; the tubular structures are wasted; the smaller arteries are dilated, and their walls thickened. On examining a thin slice under a low power, we find the relative increase of the vascular elements very remarkable. In some parts, and in extreme cases, I have seen the Malpighian bodies so closely grouped together as to remind one of a bunch of grapes, the degenerated artery representing the stem. The tubules here and there continue distended; but most are atrophied, their walls collapsed, and represented only by fibrous tissue. The degree of atrophy varies in different instances, from about the natural size of the organ to a fourth, or even less."

We have introduced entire the description of Dr. Stewart, because this stage of contraction we have not met, and therefore cannot speak of it from personal knowledge. Even Dr. Stewart says with regard to it that he has not yet traced a case from its commencement to its fatal termination, and is not aware that any case has been so observed. He had examined the kid-

neys of a case under observation for three years, and the kidneys were not much smaller than natural; and in a second case, of six years' duration, the kidneys were less atrophied than he had frequently seen them. (Bright's Diseases of the Kidney, p. 70.) Is it not possible, then, that there might have been coexistent contracting kidney?

The kidneys are rarely, if ever, the only seat of this deposit. Most frequently the liver and spleen are similarly changed and enlarged in consequence. They also exhibit the iodine reaction. In advanced albuminoid disease, the stomach and intestines are also the seat of the peculiar deposit, giving rise to the vomiting and diarrhoea which are constant symptoms.

Clinical History and Diagnosis.—A person of a scrofulous diathesis, or who has had syphilis or tuberculosis, scrofulous, syphilitic, or indeed any suppurative disease, especially of the bones, or even one in whom none of these are traceable, notices increased disposition to micturition; also that the quantity of water passed is excessive. He is, perhaps, unusually annoyed at night, and, if observing, notices that the quantity discharged is in excess of water consumed. Coincidentally, perhaps, slight dropsy is noted, more particularly about the feet, which passes away after a little rest, but later becomes persistent. This is usually slight, though I have known it general and extensive. Dr. Dickinson† is inclined to believe that the persistence of dropsy while the urine is increased is peculiar to this disorder. Diarrhoea and vomiting are not infrequent; the former, indeed, is often a cause of death later in the disease. Weakness and indisposition to exertion are also perhaps noted, and soon become marked; the patient looks worn and cachectic.

The advice of a physician is now asked, who may examine the urine, which will be found at first slightly, but later highly, albuminous, contrasting strongly with that from the contracting kidney. It is acid, and increased in quantity (50 to 200 oz. in 24 hours); is pale, watery, and of low specific gravity—it may be as low as 1005, and rarely exceeds 1015. The later diminution in quantity is not attended by changes in physical and chemical characters; Dickinson has shown that there is little diminution in the quantity of urea. Microscopic examination reveals casts of the hyaline kind, many of which have this peculiarity, that they are solid, cylindrical, and therefore much more distinctly visible than the ordinary hyaline casts found in the urine from contracted kidney. These have seemed to us quite distinctive, although they are not alone in this form of Bright's disease, nor confined to it. They are generally of small diameter, formed in tubes whose epithelium is intact; the cells seem to be cemented and rendered more permanent in their situation by the exuded matter. Occasionally epithelial casts are also present, and even casts containing oil-globules may be found. As stated, according to Dickinson, these casts occasionally give the iodine reaction, which Beale and Stewart both deny. We have never seen such response, but cannot consider it impossible; on the other hand, we should expect it more constantly. In his further study of the case, the physician will generally discover the liver to be enlarged, and perhaps also the spleen; occasionally the latter only. With these facts, and the history of suppurative disease, he is not likely to be deceived.

Prognosis.—As the disease approaches its invariably fatal end, its progress is more variable than that of the acutely inflamed or contracting kidney. For although generally shorter than the latter in its duration, it is sometimes quite as prolonged; and, though always chronic, its occasional late detection causes it to simulate even the acute disease in its course.

* Bright's Diseases of the Kidney, p. 69.

† Pathology and Treatment of Albuminuria, p. 191.

It is not impossible, according to Dickinson, for the organ to reassume its normal state if the primary source of mischief ceases before the structural changes are too extensive.

Convulsions or coma rarely supervene; on the other hand, death is more commonly accelerated by diarrhoea or pneumonia, the former more frequently. Inflammations of serous membranes are prone to occur, but, except in the occasional instance of peritonitis, rarely produce death. An interesting case, attended by this complication, is reported in the Proceedings of the Pathological Society of Philadelphia, published in the present number of this journal. In no other form of renal disease, except the fatty kidney, is so little advantage derived from treatment,—a further reason for justifying a generally unfavorable prognosis.

D. MIXED CASES.

It is undoubtedly the fact that many cases of renal malady present themselves in which there is a combination of two conditions. Thus, a kidney may be chronically contracted and lardaceous at the same time, and the combination of the fatty and the contracting state is also noted. This is the fatty and contracting kidney of Dr. Beale, of which the writer reported a typical case in the Proceedings of the Pathological Society of Philadelphia, in the spring of 1869 (*Am. Journ. Med. Sci.*, January, 1870).

It is not unreasonable to suppose that the imperfectly-formed fibrous tissue of the *fatty and contracting* kidney may originate in the way assigned by Dr. Beale for the production of the cirrhotic kidney. So, too, it is not unlikely, in cases of chronic disease after acute scarlatinal dropsy, in which hyaline casts present themselves, with little or no fat, that the organ has undergone a contraction of this kind; that the tubules, having been stripped of their epithelium, become useless, shrivel up, and assume the appearance of fibrous tissue, and that such a kidney will be found after death instead of the large white organ commonly met with in scarlatinal nephritis which has gone on to the second or chronic stage. Such a kidney we would expect to result where a parenchymatous nephritis, of Virchow and Stewart, has passed through its second stage of fatty degeneration, and reached its third of atrophy.

Such a case may be the following, reported by my assistant, Dr. Louis Starr:

John G., white, aged eighteen, is an upholsterer by trade. When six years old, he had scarlet fever, followed by dropsy. This apparently disappeared under treatment, and he remained in good health for six or eight years. About two years ago (July, 1869) he suffered from a second attack of dropsy, attended with much swelling of the legs and face. He had no fever, but his urine was scanty and often dark in color. No sufficient cause can be found for this last attack. He states, however, that he had taken a bath but a short time before it came on, but was neither very warm nor perspiring at the time. He was treated by several doctors, under whom he improved.

He first came to the University of Pennsylvania May 13, 1870, when his legs and feet were œdematous. His appetite and digestion were good. He was placed upon the solution of the acetate of iron. Under this treatment his general condition improved much, the œdema disappeared, and the albumen diminished, but remained considerable.

In clinic, on March 23, 1871, he again presented himself, complaining of a sense of languor and weakness, and of being unfit for any bodily exertion; he also often feels chilly, and his feet and hands are cold. There is no œdema about the eyes, but that of the legs remains slightly; is barely appreciable. He states that his legs become much more swollen at night. His appetite and digestion are good, and he has no headache or convulsions. His urine is pale in color, and on standing a white flocculent deposit falls, forming about one-twentieth of

the bulk. Sp. gr. 1008. Reaction slightly acid. On heating and adding muriatic acid, a considerable deposit of albumen takes place,—about one-fourth of bulk tested. Microscopical examination of the urine shows granular and hyaline casts. Occasionally an epithelial cell or a few oil-drops are contained in a cast otherwise hyaline.

He was ordered gallic acid, gr. v, three times a day, with acetate of iron in the form of Basham's mixture. The gallic acid was afterwards increased to gr. xv three times a day, and again to gr. xv four times a day. The œdema disappeared entirely, and his general condition constantly improved, but the condition of his urine as to quantity of albumen and presence of casts remains unchanged. At this time (May 4) he is feeling quite well; there is no dropsy; the albumen has diminished to one-eighth the bulk of the urine tested; a volumetric analysis of the morning urine, made to-day, gave 32 grammes of urea in 1000.

In conclusion, let us sum up what seems to have resulted from this study. First, we have acute Bright's disease and chronic Bright's disease. The former includes a single condition of acute nephritis, whatever be the method by which produced, easy of diagnosis, and generally favorable in its termination, but occasionally passing over into a chronic form of fatty transformation, and possibly also into that of chronic contraction. Chronic Bright's disease includes, first, the fatty kidney, which may originate idiopathically, or result from acute inflammation, generally easy of detection, and fatal in prognosis. Second, chronically-contracted kidney, which, though usually originating idiopathically, may result from an acute nephritis,—generally recognized, if careful examination is made,—ultimately fatal, but with which life may be kept up many years, and which may even exist many years unrecognized. Sudden death may occur. Third, the lardaceous, albuminoid, or waxy kidney, similar in its early symptoms to the chronically-contracted kidney, but usually capable of recognition in connection with the history, condition of liver and spleen, and large quantity of albumen as compared with the former. Prognosis ultimately fatal, though the end may also be averted. Fourth, we recognize certain mixed forms, difficult to discriminate in their precise conditions during life, and fatal in proportion to the degree and kind of degeneration, with regard to which there must also be considerable uncertainty.

A CASE OF ACCIDENTAL OPIUM-POISONING, TREATED BY BELLADONNA. RECOVERY.

BY C. H. ALDEN, M.D.,
Surgeon U. S. Army.

L. took by enema, at about five o'clock P.M., January 21, 1871, between twelve and fifteen grains sulphate of morphia. She had at times, but not habitually, used injections of this remedy into the vagina and rectum, but by some mistake was not aware of the large dose she was taking on this occasion. It was dissolved in about two fluidounces of water, and was all retained. The medicine began to produce its effects in about thirty minutes, but, neither the cause nor the serious nature of her condition being understood, medical aid was not called in until about 8 P.M. At this time I found her in bed, slowly rolling her head, her eyelids half closed; conjunctivæ injected, the pupils contracted to mere points; irides immovable; sometimes talking in a partially incoherent, excited manner; skin cool; feet quite cold; lower extremities deficient in sensibility and lying motionless; pulse 60; respiration nearly normal. Her mind was much confused, but when persistently addressed, her attention was aroused, and she replied, though rather incoherently. She said her head felt very heavy; she suffered from vesical tenesmus, but was unable to pass her urine, from an intolerable itching of the skin, and from nausea. She vomited at intervals. She said she saw every object double and very indistinctly. About eight or ten

fluidounces of urine were removed by the catheter, and a large quantity of warm water was injected into the rectum. No motion taking place, and a soap suppository also failing to excite it, a stomach-tube was introduced into the bowel and the contents drawn off as thoroughly as possible. Through the same tube more water was thrown in and withdrawn. Hot applications were made to the feet, and sinapisms put on the calves of the legs. Small draughts of strong coffee were given, but were mostly rejected by vomiting. Extract of belladonna was administered in $\frac{3}{4}$ -grain doses every half-hour until three grains were taken. The tendency to sleep increased somewhat for a time, and twice she fell asleep, though constantly talked to, but was soon aroused. Towards 11 P.M. she became less somnolent, the nausea diminished, and she began to complain of pain in the region of the stomach. Her eyes were still heavy, pupils unchanged, and mind still confused; pulse rose to 72. The pain in the stomach recurred every few minutes, and became at times very intense. She made loud outcries, ground her teeth, and threw her arms about violently. She described the pain as like that of cramp. She now complained of great thirst. Hot fomentations, a sinapism, and the tin stomach-warmer were successively applied over the stomach. Warm drinks were administered, and two grains of extract of belladonna given in divided doses. I would have tried chloroform by inhalation cautiously, but she had been warned against its use by some former medical attendant. The vomiting had now ceased. Towards 2 A.M. the pain became gradually less, and was felt more in the region of the umbilicus. She was considerably exhausted. The pupils were unchanged, and her mind was still clouded. The lower extremities had become warmer, and she had some power over and sensation in them. I directed small amounts of strong broth to be given every hour, and that she should be allowed to sleep if she could.

Jan. 22, A.M.—She has not slept since last visit. Her mind is now a little less confused. The pupils are unchanged. She is extremely excitable, sometimes crying, again starting when a person comes near her. Pulse 72. Complained of pain from inability to pass water. About twelve fluidounces were removed by the catheter. To continue to take concentrated nourishment at short intervals. P.M.—Has not slept since last visit. Condition about the same in every respect, except that pulse was about 90. Catheter again necessary, removing about twelve fluidounces of urine. Prescribed two fluidrachms of elixir valerianate of ammonia, and, if necessary, one fluidrachm every hour, until four doses shall have been taken. If she still does not sleep, to take twenty-five drops of the fluid extract of hyoscyamus.

Jan. 23, A.M.—She slept about ten minutes last night. Her condition when first seen this morning was about the same as last night; but towards noon her face became flushed, severe headache came on, and her pulse rose to 120. Pupils unchanged. Ice was applied to her head, a mustard footbath was administered, and sinapisms were applied to her lower extremities and between her shoulders. Cups were inadmissible, owing to her excitability. Her bowels were moved by a purgative enema. She passed urine naturally. During the night the symptoms of congestion of the brain abated, and early in the morning she slept about four hours.

Jan. 24, A.M.—Her condition is now very much improved. Now for the first time since the attack commenced her pupils are of natural size or nearly so, and the irides are movable. Her mind is now quite clear, and her pulse has fallen to 72. She is still quite weak, and there still remains some irritability of the nervous system. It was about a week before she recovered her usual health.

On examining the sulphate of morphia, of which that taken was a part, I find it bears the label of T. and H. Smith, Edinburgh and London. It is more compact than the ordinary article, and very slightly discolored. Given in $\frac{1}{4}$ -grain doses, it proves to be somewhat deficient in hypnotic power, but produces no unpleasant symptoms. It has the usual reactions of a morphia salt. It should be noted that this patient generally avoids opiates, on account of their constipating tendency. The prominence of the gastric spasm and the persistence of the contracted condition of the pupils will be noticed,

as also the effect upon the lower extremities and bladder. It soon became evident that the danger lay in exhaustion rather than from the direct effect of the poison. Disliking to force sleep by pushing any medicine, I relied chiefly upon nourishment supplied frequently and in proper quantities, trusting that, under its calming and restorative influence, natural sleep would be induced. It was delayed much longer than I anticipated. The five grains of extract of belladonna, given within the space of a few hours, produced no effect upon the pupil, though it was known to be active and was probably retained.

MAMMARY ABSCESS AND ITS REMEDY.

BY JOSEPH R. BECK, M.D.,

Lancaster, Ohio.

AMONG all the troubles incident to, or connected with, child-bearing, there is none so prolific of bad results, both to the medical attendant and to the parturient patient, as a mammary abscess. The occurrence of such an abscess in his patient has lost many a physician his reputation in a whole family, and very frequently not only in the immediate family of the sufferer, but even in the whole of a wealthy and influential connection. The attention of the profession cannot be too strongly directed to this fact, that the occurrence of a mammary abscess in a patient recently delivered, and still under observation, is generally attributed to the neglect of the physician in charge. This may appear to be a wholesale accusation, but my opinion is based upon close observation, and seems to me to be fully sustained by the facts in the case.

It is not the purpose of this article to treat of the symptoms of this disorder, nor to enter upon a discussion as to the relative merits of different plans of treatment, but simply to give the views of one observer upon the mode of effectually preventing any abscess of the mammary gland from troubling either the patient or the obstetrician.

The symptoms of inflammation of the gland under consideration are well known to the profession. Whenever these arise, every effort should be made to arrest the secretion of milk; this will relieve the mother, and not necessarily interfere with the well-being of the child, which, if proper care be taken of it, will generally be found to thrive upon good and pure cow's milk, with the occasional addition of a small quantity of lime-water.

The treatment, therefore, is to be begun as soon as there are any symptoms that mammary abscess is likely to occur. I have found the following prescription of service:

R Extract. Belladon. Alcoholic., ʒiv ;
Glycerinæ, q. s.;

mix them to the consistence of a moderately thin paste. This is to be spread in a medium thick layer with a spatula, over and upon both mammary glands, from the sternum to the axilla. Cover with a cloth dipped in olive-oil, and this in turn with oiled silk. Allow the dressing to remain undisturbed during a variable period of from two to three or four weeks, inasmuch as it can be worn by the patient for any length of time without inconvenience.

The argument in the case is directed, of course, to threatening abscesses; but all will at once recognize the appropriateness of the treatment in cases of still-born children, where it is certainly desirable to arrest the secretion of the milk at once. In these cases apply the remedy within an hour or two after the birth of the child. I have never known this treatment to fail of its desired effects, where it was used in time.

A CASE OF OBSCURE CEREBRAL DISEASE.

RECOVERY AFTER THE ADMINISTRATION OF IODIDE OF POTASSIUM.

BY J. CUMMISKEY, M.D.,

Physician to St. Mary's Hospital.

GENEVIEVE F—, æt. nineteen, by birth a German, entered the St. Mary's Hospital, June 17, 1869, suffering from symptoms of acute meningitis, which was occasioned, it was supposed, partly by a fright and partly by exposure to cold during the menstrual period. For some days after admission she was very violent and difficult to control; but finally she became calmer, and then passed into a condition of apparent imbecility. She would sit day after day in the same position, noticing nothing that was passing around her, nor replying to any questions that might be put to her. Medicines, producing little effect, were discontinued, and the unfortunate girl came to be looked upon as hopelessly insane.

This was her condition when I came on duty, October 1, and as nothing special was being done for her, and, indeed, as I knew of nothing that could be done for her, she was generally passed by with a single inquiry to the resident as to her condition, which elicited always the same response, "She is no better." Sincerely pitying the poor girl, and wishing to do something, in appearance, at least, to relieve her, I determined to try the effect of iodide of potassium. Accordingly, about November 15, she was given this salt in ten-grain doses three times a day. The effect was astonishing. In a few days after commencing the iodide she began to show signs of intelligence. She steadily improved under its use; and in three weeks after taking the first dose she was discharged cured, December 10, 1869. She, whose mind had been clouded for nearly six months, who had been mute for about four months, and whose restoration was despaired of, was, under the use of iodide of potassium, restored to health and to her family.

The history of this case is written from memory, the notes having been unfortunately lost.

NOTES OF HOSPITAL PRACTICE.

UNIVERSITY OF PENNSYLVANIA.

SURGICAL CLINIC OF PROF. D. HAYES AGNEW.

Reported by Dr. F. Muhlenberg.

VASCULAR NÆVUS OF FACE.

THIS young gentleman has consented to appear before the class this morning, and comes a long distance—from the northern part of New York State—for relief from one of those varieties of vascular tumors which very often prove a source of much anxiety to physician and patient, and eventually require the aid of the surgeon for their removal. He is but twelve years of age, and has had this growth since birth. At first it was comparatively small, but it has gradually been increasing in bulk during the past five or six years. It should have been extirpated long since, as very often, owing to the nature of these tumors, the surface ulcerates, and death sometimes suddenly occurs from the free hemorrhage which ensues.

These vascular or erectile tumors are commonly known as *nevi materni*, or mother's marks, and are not only very unsightly from the bright scarlet or deep blue contrast which they make with the surrounding normal tint of the skin, but also prove a source of danger to the patient, since they frequently, as just stated, ulcerate superficially, and bleed most profusely. As a rule, they may be said to be congenital, but cases are not wanting in which there has been no manifestation of their existence for seventeen or eighteen years after birth, and even for much longer periods,—one instance being on record in which the patient was fifty years old. This mass, as we perceive on examination, is of considerable size, blue in appearance, compressible, slightly lobulated, has a perceptible pulsation when compressed by the fingers, is subcutaneous, and is situated along the side of the nose, extending from the angle of

the mouth upward to the inner canthus of the eye, and outward to a point on a line with the external canthus. It is, no doubt, fed by the arteries which, from your anatomical knowledge, you know to exist in this region, viz., the transverse facial, facial, infraorbital, angular, etc., rendering it, therefore, exceedingly vascular and difficult of removal.

These *nevi* are essentially the same as erectile tumors, or those frequently spoken of as aneurisms by anastomosis; and, indeed, the resemblance they bear to the erectile tissue of the corpus cavernosum is so close that, in their general structure, no marked difference can be found to exist. The tumor may, therefore, be regarded as a mass made up of narrow bands or chords forming the walls of a vast number of spaces filled with blood, supplied by the connecting arteries and veins. The comparison which will give you the clearest idea of its construction is to a sponge soaked in blood,—all the cells in which open freely and widely into one another. This explains the freedom with which it yields to compression, as sometimes we can empty the mass to half its size, but as soon as the force is removed it fills up again. Many pathologists, since the researches of Paget and others have been made, take the ground that most of these erectile or vascular tumors, especially if like the one before us,—the *subcutaneous* variety,—are collections of minute *dilated* blood-vessels, arranged in the closest manner possible, in a limited area of some normal structure. Microscopically, they have been found to have arteries passing into the base from the under surface of the skin, and veins passing out in all directions from them, much larger than the entering vessels, and also much more numerous. Suppose, now, you recall the appearance of a mass of varicose veins, and imagine them all intermingled and intertwined, you would have a good idea of the reticulated character of this mass, with the integument dissected off. A prominent microscopist abroad has stated that he has observed, along the track of the vessels entering and emerging from these tumors, numerous little *culs-de-sac* which could be emptied or filled at pleasure by alternately increasing and diminishing the pressure upon a piece when under the microscope. These *culs-de-sac* were, as a rule, twice as long as the vessels were wide, and smaller at the end towards the vessels than at the end towards the tumor. It has been found, however, that even if the blood-vessels in the *mass* of the tumor are thus dilated, the dilatation does not extend very far into the main arteries leading to it and veins emerging from it; the former enlarge only just before entering, and the latter soon regain their normal size after leaving it. The rule, therefore, to be followed in this case, as in all others of a similar nature, is that given by Sir John Bell, "not to cut into it, but to cut it out." Sometimes the arteries running into the mass are largely dilated, and the veins less; again, the reverse obtains. These remarks will give you some idea of the difficulty of treating these cases except by surgical interference, and of the precautions necessary to guard against cutting into them during their extirpation.

Upon a closer examination we find this mass to extend down to the mucous membrane lining the interior of the cheeks and mouth; and were it not that we wish to avoid performing an experimental operation upon this patient, as I have no precedent to guide me, I would ligate it from the inside of the mouth by transfixing it with a double ligature, and allow it to separate from the surrounding tissues by the sloughing process. It might, however, be a bad procedure, for the discharges, which would be constantly running into the mouth, would be very offensive, and might set up an amount of irritation, locally and generally, which would interfere much with the subsequent cure of the affection.

The patient has now been etherized, and we will proceed to remove the mass by making a crescentic incision from the inner edge of the orbit down the side of the nose to the angle of the mouth, and a short distance along the edge of the upper lip, just at the line where the skin and mucous membrane became continuous. This incision is then joined above by one extending from the outer canthus of the eye and beneath the edge of the orbit. Our object is, of course, to avoid as far as practicable an unsightly scar after the removal of the tumor, but, as it is situated just over and among some of the most important facial muscles, the task is by no means an easy one. Having now made our incisions through

the skin and subcutaneous tissue, we will dissect up this flap, beginning from the inner canthus of the eye, and being exceedingly careful not to cut into the vascular growth under our knife, an accident which would occasion exceedingly troublesome hemorrhage. The upper border of the mass has now been carefully exposed with comparatively little loss of blood, and we now commence dissecting upwards at the angle of the mouth. It is quite a difficult matter in this region to avoid cutting into the tumor, as its connections run down almost to the mucous membrane itself; but we have been successful in dissecting it up from that membrane by alternately seizing it with the fingers and forceps, and using the knife with extreme caution. The branches and the main trunks of the arteries, which have been cut, have been ligated; and as we have now reached the upper border of the orbicularis-oris muscle, and have a sufficient quantity of the mass free at its base, we will transfix it with a needle armed with a double ligature, and tie this firmly both ways, so that each embraces and surrounds one-half the base. This having been done, the upper edges of the flap are now united by the silver wire, the ends of the silk ligatures drawn out of the dependent angle of the wound, the strangulated mass covered with lint saturated with the carbolic acid solution, and the parts allowed to slough out, which process will probably be completed in a week's time.

[In a week the patient was presented to the class again. The tumor, as ligated, had entirely sloughed off, and the parts were ready to be approximated by adhesive straps, as the edges, although healthy in their appearance, would not allow of silver wire being introduced. On the fifth night after the operation he had a slight hemorrhage from the angle of the wound near the mouth, but this was quickly and easily controlled by a compress. A cerate dressing was placed over the wound, and this covered by a firm compress, and the patient attended to daily. In two weeks subsequent to the operation he started for his home, in New York State, the wound having nicely healed throughout by granulation, except at the most dependent corner, and having left hardly any perceptible cicatrix.]

ANCHYLOSIS OF JAW FROM FRACTURE OF ZYGOMATIC PROCESS.

This patient, who is eighteen years of age, and comes here from Washington county, was kicked in the face, when only eleven years old, by a horse. At that time violent inflammation set in, and various fragments of bone came away, showing that a fracture of the zygomatic process of the temporal bone must have occurred. As a subsequent result of the attending inflammatory process, lymph was thrown out, this organized into the well-known connective tissue, so often found in these cases of injuries to the joints, and false ankylosis took place,—the boy being from that time up to the present unable to open his jaws more than an eighth of an inch. Upon examination, we find a scar over the left zygomatic region, two inches in length, and a considerable, hard, and resisting prominence in front of the ear. The temporal muscle has also become much hypertrophied from the constant efforts made to open and shut the jaws.

These cases of ankylosis are not at all uncommon, and, according to the amount of immobility that has been produced in the joints attacked by arthritis, are designated as *false* or *true*. True ankylosis involves the destruction of the interior of the joint and the union of the opposing ends of the articulating bones, and, consequently, the subsequent and complete immobility of the joint; or it may be produced by bony processes, which very often take the place of the ligaments. In false ankylosis, however, only a departure from the natural condition of the parts exists; the ligaments are only stiffened and contracted, and the tendons of the muscles playing over and about the joint are also thickened by the deposit of organized lymph. Thus we perceive the reduction of a false ankylosed joint is practicable by means of force and motion applied constantly, or at short intervals. This patient having now been etherized, we will try to dilate the jaws, or force them apart, by means of the screw forceps; but, having used as much force as is safe, we find our efforts are unavailing. Several operations have been devised for the relief of this affection, the principal of which are the one just attempted before you,—that of forcible dilatation by the screw forceps,—and division of the fibres of the masseter muscle. This latter procedure we now have recourse to, and introduce this knife between the muscle and bone and divide some of its fibres, and later some fibres of the temporal muscle. We can

now succeed in separating the jaws to the extent of half an inch, and with the screw dilator have forced them open about an inch and a half. This treatment of forcible dilatation will be kept up for some time, so as to prevent a recurrence of the trouble by reunion of the muscle and formation of new adhesions around the joint.

[The patient under this plan eventually recovered motion sufficient for all practical purposes, and left for his home satisfied that a cure had been effected.]

JEFFERSON MEDICAL COLLEGE.

CLINIC OF PROFESSOR GROSS, APRIL 7, 1871

Reported by Dr. Ralph M. Townsend.

WITHERING SCIRRHUS OF THE BREAST.

THE attention of the class is called to the wasted, atrophied condition of the breasts of this patient, particularly the left. There is, however, no retraction of the nipple, but the woman complains of a fine, stinging pain like that left after a needle-thrust.

On the affected side there is slight enlargement of the axillary lymphatic glands; but these I will not remove, as they are probably affected by sympathy only. The gland will, however, be excised. There is not enough flap to cover the wound, so that healing must take place by the granulating process. The woman's general condition is passably good. Her tongue is about as clean as the tongues found in the majority of American women.

[Owing to the clean shave, which the dissection necessitated, of the ribs, considerable trouble was experienced in stopping the hemorrhage from the cut twigs of some of the intercostal arteries. The unsuccessful experiment was tried of using small cutaneous portions of the tumor as plugs. Pieces of lint soaked in Monsel's solution, applied directly to the several vessels, finally stopped the bleeding. A section of this tumor, on microscopical examination, showed the pectoral muscle to be involved and infiltrated with cancer cells. The cells themselves were withered and dwindled, and undergoing fatty degeneration. The patient presented herself at the clinic a week after the operation. Granulation was going on finely.—R. M. T.]

CONGENITAL WEBBED FINGERS.

Looking at this little girl, aged one year, it will be observed that the middle and third fingers, on both hands, are firmly webbed together. On the dorsal surfaces the line of junction is well shown, but on the palmar surfaces the fingers seem smoothly merged. Guided by the dorsal crease, we will separate the fingers on one hand, leaving the remaining hand for a subsequent operation. The cut edges on either finger will be approximated by interrupted sutures; and then the hand will be dressed with patent lint saturated with sweet oil, and bandaged.

SCROFULOUS ABSCESS.

The young woman who now stands before you looks the embodiment of health. She has a good figure, rosy cheeks, and a ripe lip; but, you will observe, a swelling occupies the left angle of the lower jaw. There is no discoloration of the skin, but the tumor, which has existed since last fall, is movable and fluctuates. With its first appearance came pain, but that has since disappeared. This tumor is not affected by swallowing: hence it is not connected with the larynx or trachea.

Now, this swelling affords ample field for diagnosis. A year ago she had earache, and this tumor followed its disappearance. This, therefore, may be a chronic abscess, having its origin in the inflammation and degeneration of one or more lymphatic glands in this region. These glands are extremely liable to become affected by reflected irritation, such as a toothache or earache might produce. Sometimes these glands simply enlarge and indurate, at other times they enlarge and suppurate. Such an abscess can occur only in a person laboring under a scrofulous or tuberculous diathesis.

Again, this may be a cystic tumor, although I imagine not, as it would hardly have acquired so great a bulk in so short a time. It may be simply an enlarged lymphatic gland, possessing this peculiar sense of fluctuation on account of its inherent elasticity. Finally, it may be an aneurism; but there is absence of pulsation, and I am therefore inclined to think it a chronic abscess. The exploring needle will tell. Pus follows

its withdrawal and confirms the diagnosis. Now that I have opened this abscess, you see that I have collected about two ounces of imperfectly formed pus.

We will introduce a tent to cause deep-seated granulation to spring up. If this girl has anything like a chill, we will give her twenty-five drops of laudanum. Let her eat no meat; and keep her face and neck covered so as not to be exposed to the air.

CONGENITAL CYSTIC TUMOR OF THE CHEEK.

Margaret Brown, aged four years, has a congenital tumor of the cheek. The mass is lobulated, pear-shaped, and the seat of distinct fluctuation. I am inclined to think this a cystic tumor, multilocular or multiple, or made up of several cysts. I remember a remarkable case occurring in this city, of a similar tumor, which covered the side of the neck and face. When the child was six weeks old, I removed the entire growth, the child making an excellent recovery. Caution must be exercised in the diagnosis of these tumors. The best men are liable to be mistaken. Sir Astley Cooper tapped a woman for dropsy when she was simply pregnant.

This patient will return for an operation.

[March 19.—Operation performed. During its progress the cyst was tapped, and a quantity of chocolate-colored fluid escaped. The tumor consisted of many cysts imbedded in a mass of fat, and a good deal of fibroid tissue. The interior of the tumor was shining like serous membrane, and trabeculated. The parts, after the operation, were brought in contact by means of the interrupted suture, adhesive plaster, and compress.—R. M. T.]

GANGLIONIC TUMOR.

This young lady is aged seventeen years. She has a tumor on the back of her wrist, which rolls under the skin. This tumor is connected with the sheath of one of the extensor tendons, and is filled with an accumulation of synovial fluid. Such tumors are of common occurrence. One way to cure them is to break them, and thus have the synovial fluid diffused, and the parts then painted with tincture of iodine, and banded to assist in its absorption. Sometimes these tumors are filled with rice-like bodies, the latter being portions of the inner wall of the tumor that have become covered with lymph and detached.

In this case I shall puncture the tumor subcutaneously, squeeze out its contents, then paint the skin over it with dilute tincture of iodine, and apply a compress and bandage. You see the pellucid, jelly-like matter that follows the withdrawal of my knife.

SEBACEOUS TUMOR OF THE CHEEK.

A young girl, aged fourteen years, has a sebaceous tumor located on her cheek. Such a tumor as this is the result of the obliteration of the mouth of a sebaceous follicle. The retained secretion, augmenting, causes inflammation. The wall of the follicle receives more blood, expands, and thickens; and what before was an invisible now becomes a visible sack. The only remedy here is to dissect out the sack. The smallest portion left will redevelop the tumor.

[The sack was dissected out, and the parts approximated with two hare-lip pins, around which thread was wrapped elliptically. The pins were removed on the third day, and the suture allowed to remain until it dropped off.—R. M. T.]

VACCINATION OF PREGNANT WOMEN.—Dr. Barnes, in the *British Medical Journal* (March 4, 1871), urges the importance of vaccinating pregnant women, if they are at all exposed to the epidemic influence of smallpox, and for these reasons:—

1. Pregnant women, living under epidemic or zymotic influences, are more prone to take the prevalent morbid poison than others; 2. Having taken a morbid poison, they are less able to throw it off. Their excretory organs, charged with the double duty of purifying two organisms, are liable to break down under the burden; 3. The morbid poison then pursues its course into a system which is less able to resist its injurious action. Abortion and a most dangerous form of puerperal fever are very likely to follow. Against this there is certainly a danger of producing abortion by vaccinating a pregnant woman, but this, Dr. Barnes thinks, occurs only in women in whom a miscarriage is imminent.

OBITUARY.

DR. JOHN ADDINGTON SYMONDS.—Although not so widely known in this country as some of his literary co-laborers, this gentleman, who died recently in England, contributed many valuable papers to medical serial literature, and lent his active co-operation to several of the great standard medical cyclopædias. He had been President of the British Medical Association; delivered the Gulstonian lectures in 1858, on "Head-ache," and also a thoroughly exhaustive lecture on "Death by Chloroform," before the Harveian Society. He was an excellent classical scholar, and was said to "combine in a degree seldom found in members of any calling the proficiency of a master in his profession with the many-sided culture of the votary of literature and art." He had several non-medical works dedicated to him, one of which, a translation of Horace's Odes, was a rare compliment to his classical attainments. He wrote, among numerous other papers, the article "Tetanus" for the "Cyclopædia of Medicine;" the articles "Age" and "Death" for the "Cyclopædia of Anatomy and Physiology;" the "Pathological Introduction" to Tweedie's "Library of Medicine," and most of the articles also on "Diseases of the Digestive Organs." But his contributions to literature were not confined to the domain of medicine; he wrote several miscellaneous works, conspicuous for their pure and elevated style, including lectures on "Appearitions," on "Beauty," on "Sleep and Dreams," etc. What he himself wrote on the death of Sir James Simpson may now be applied to the subject of our present obituary:—

"He hears no clamor of polemic fray,
Nor recks he what unthankful men may say;
Little can vex him in that sleep profound."

A NEW AND SAFE METHOD OF DELIVERING IN ARM-PRESENTATIONS, AFTER OTHER METHODS HAVE FAILED.—Dr. Park B. Tucker, M.D., gives two cases (*London Lancet*, Feb. 18, 1871, p. 230) in which it was found impossible to turn the child. Its body was therefore perforated, and the abdomen and thorax sufficiently emptied to enable the physician to reach the bodies of the vertebrae. These were crushed with a common pair of tooth-forceps. The body now became bent at that point, and descended sufficiently low to permit the operator to pass a handkerchief around it. On making traction, the pelvis and lower extremities were born, followed by the trunk and placenta. Instead of tooth-forceps, the doctor recommends a pair of spring-cutting blunt pliers, with long arms, such as are used by dentists for cutting off incisor teeth, but on a much larger scale.

CARBOLIC ACID IN CARBUNCLES.—Dr. J. C. Nott strongly commends the local use of carbolic acid in carbuncles. He makes an incision into the inflamed tissue, stuffs this with cotton saturated with the acid, and also paints the whole surface of the hardened mass with the drug. The latter he repeats daily for a week or more as the case may require. His experience with the remedy, however, appears to be limited to a single case. This did extremely well, an apparently formidable carbuncle subsiding in a week.

RARE ENTOZOA IN THE HOG.—Dr. T. Spencer Cobbold calls attention (*British Medical Journal*, January 14, 1871, p. 50) to an interesting discovery in the hog of a remarkable parasite, the *Stephanurus dentatus*, a species of strongylus not alluded to in the works of Von Siebold and Kuchenmeister, and which has hitherto been described only by Dr. Carl Moritz Diesing, of Vienna, in 1839. Since then it seems never to have been met with until very lately by Dr. Fletcher, of Indianapolis, Indiana, who found great numbers of the worm in hogs killed for curing, and who forwarded the specimens to Dr. Cobbold for examination and determination. The true discoverer, Dr. Natterer, obtained his specimens from one or more individuals of a Chinese race of hogs at Barra do Rio Negro, Brazil, on 24th March, 1834.

THE MEDICAL TIMES.

A SEMI-MONTHLY JOURNAL OF
MEDICAL AND SURGICAL SCIENCE.

PUBLISHED ON THE 1ST AND 15TH OF EACH MONTH BY

J. B. LIPPINCOTT & CO.,

715 and 717 Market St., Philadelphia, and 25 Bond St., New York.

MONDAY, MAY 15, 1871.

EDITORIAL.

FOUNDLING-HOSPITALS.

"GINX'S Baby, his Birth and other Misfortunes," is the title of an anonymous work which has attracted such general attention that the fifth English edition is already exhausted, though but a few months have elapsed since the book was first issued. The story is full of pathos, and bears witness that the author is terribly in earnest. With ruthless hand he lays bare ugly and repulsive facts, from which an easy-going public, half willing to remain in ignorance, now turns with a shudder of horror. It is impossible, it cries, with our system of poor-laws, foundling-hospitals, public and private charities, church organizations, and social science committees, that such a lamentable state of affairs can exist! "I never read a more improbable story in my life," writes the critic. "Nevertheless it may be true," rejoins the unknown author.

Another publication has recently been issued in New York, which has also attracted marked interest and attention, entitled "The Education and Care of Abandoned Children," by Dr. Abraham Jacobi. Here the subject is treated in another way; the weapons used are not pathos, satire, and invective, but bare and bitter statistics, sought for and collected from all the large cities in Europe, supplemented with a report of the New York Nursery and Child's Hospital, an institution with which Dr. Jacobi has for some years been prominently connected. Turn where we will, from these dry columns of statistics but one answer can be elicited, but one truth evolved. These figures, each unit of which represents an infant life,—and their number gives strength to their feeble voices,—bear testimony that in vain do we hope to violate with impunity that law of nature which demands that the infant shall draw its nourishment from the mother's breast. In vain has the brain of man conceived and put into execution legislative enactments, foundling-hospitals, and nurseries; in vain has Charity stretched forth her hand to strengthen the feeble hold by which the abandoned child clings to its tiny life; in vain has Science analyzed the maternal nourishment, and with cunning hand compounded in the laboratory "Food for Infants" which shall so nearly simulate that provided by Nature as to deceive even Nature herself.

Everywhere the same inevitable result, rendered emphatic by repetition, proves to us that the only method

by which the lives of young infants deprived of maternal care can be saved is by substituting for the mother another, who, though venal, shall yet supply the food destined by nature for the child.

According to Wappäus, the ideal or normal rate of infantile mortality during the first year is about one-tenth of the entire number, and to the attainment of this result the efforts of all public institutions should be directed. Wasserfuhr, the latest worker in this field, writes, "If the mortality in these institutions exceeds twenty per cent., it must be considered *excessive*." Judged by this standard, how unsatisfactory are the results which our most zealous efforts have as yet attained! Those who wish for full information on the subject will find it in the pages of Dr. Jacobi's pamphlet; but let us, who have to grapple with this problem here at home, study the question as illustrated by this report of the New York Nursery, a charity which had its origin in response to the cry of the benevolent, "Show us the way, that we may give." The building is commodious, the ventilation admirable; the medical staff comprises men distinguished for their ability and conscientious zeal; and the management of the institution is intrusted to ladies, to whom the care of those "waifs of humanity" has been a "labor of love;" and yet Dr. Jacobi has shown that since 1870 there has been a death-rate of fifty per cent. in children varying in age from four months to two years. He humanely hesitates to calculate the probable death-rate if only new-born children had been admitted.

Such, then, are the results attained under circumstances the most propitious for the success of this system. How is it where the foundling-room is attached to a large general hospital, and the infant breathes an air contaminated by diseases and by emanations arising in consequence of insufficient cleanliness in the ward itself?

From our own experience in a large hospital, we must bear witness that, in spite of the untiring efforts of the medical staff, and of others in charge of the institution, the death-rate of those foundlings retained in the hospital has been, and still is, year after year, nearly cent. per cent.

Let us, then, look this question in the face, and recognize the fact that foundling-hospitals have been tried in the balance and found wanting. But one plan offers any hope of remedying this evil,—that, namely, of "boarding out" the infant in the country, under the supervision of local authorities, public or private.

The question of the possibility of this plan can only be answered by an experiment; suffice it to say that those who have given the subject much serious and anxious consideration maintain that it is practicable, and that the demand for homes will create the supply, and they are the more justified in entertaining this belief, because the enormous saving in expense, secured by the abandonment of costly institutions, will provide for the adequate recompense of those to whom the care of the infant is intrusted.

If this plan be judged inadvisable at present, this much, at least, can be done in large lying-in hospitals,

where the number of foundlings is exceedingly small, viz., provision can and *should* be made for wet-nurses during the first three months of infant life, when the mortality is so excessive. Among those women who are the recipients of the benefits of these charitable institutions, some, by the death of their offspring, are left with full breasts, while in others the supply of milk is so bounteous that, without detriment to their own child, nourishment can also be provided to another. Let those for whom provision has been made by the community during childhood repay the debt to the children of the State, "*the orphans*," as the French law terms them, and by this means give the infant a chance, slight though it may be, in its "struggle for existence."

MEDICAL KNIGHTS.

MEDICINE has lost in the past year two of its most famous men, Sir James Y. Simpson and Albrecht von Graefe. One was knighted, but the other possessed no rank. The memory of both, however, will rest upon their labors alone, and they can well afford that it should be so. At the same time, every one will concede that to have been knighted was no more than Simpson's due, and it would have been an equally graceful acknowledgment of ability and extraordinary achievement had the King of Prussia conferred a similar honor upon one who had done so much in extending the national reputation as Von Graefe.

It is by no means certain that had Von Graefe been an Englishman his chances for knighthood would have been in any way improved. We do not remember the cause for which Sir James Simpson received his title. It may have been for the introduction of chloroform: we hope it was; but it is quite as likely to have followed attendance upon the royal family. It is to this latter class of services, indeed, that the medical men of Great Britain too often owe their elevation. It is true that being invited to attend a member of the royal family is an honor in itself. So that when Sir Henry Thompson informs us in the headings of his papers that he was "surgeon extraordinary to H.M. the King of the Belgians," he does so with just pride. But when he is dubbed knight for performing lithotripsy upon the king, we are led to infer that the honor is bestowed not so much in recognition of Sir Henry's position as a representative surgeon as in mere payment for services rendered. Knighthood, in sooth, is in itself a good fee. It strengthens one in the eyes of the publisher, as well as in those of the general practitioner. Plain Mr. Thompson might demand in vain fees which Sir Henry obtains without difficulty. But Sir Henry had already enjoyed the luxury of type, and, let us hope, had decided the point of provincial patronage and the theory and practice of compensation to his entire satisfaction, long before he had been called to Brussels. It remains a matter of doubt whether Sir Henry would have been recognized by royalty at all had not his patient been the queen's uncle. A dignity so bestowed

can have but a limited value to the recipient, and can be at most a matter simply for congratulation. What we would ask for Sir Henry is a *real* honor, not a make-believe,—a recognition from a sovereign, not a gift from a patient.

Here in democratic America professional dignities have but a general interest. We can afford to be amused at the kind of payment Sir Astley Cooper received for removing a sebaceous tumor from the scalp of George IV.,—£500 and a baronetcy. We read of the simple-minded Charles Bell practising the court etiquette at home prior to his undergoing the ceremony of receiving his title, and regret that he could not have been allowed his professional honors in a more suitable manner. The possession of a title did not save Sir Richard Croft from suicide, nor the memory of Sir Everard Home from universal execration as the purloiner and destroyer of the Hunterian manuscripts. After all, no truly great man needs a title. We are really glad that Dickens declined a baronetcy, and that Jenner, Hunter, Goodsir, and Faraday escaped it.

It must be an agreeable thing, though, to become a knight for removing a sebaceous tumor, and many of us who put forth no claim to greatness would be willing to crush stone if knighthood were to be our reward. How many titles have Americans lost by being placed beyond the pickings of the flesh-pots of kings! Dr. Gunning, for example, for treating the fractured jaw of Secretary Seward might have become a member of the Guelphic order at least, while Physick, for performing lithotomy on Chief-Justice Marshall, would have been known to the present generation as Sir P. S. Physick, Bart.

TRANSACTIONS OF SOCIETIES.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

AT a conversational meeting, held March 22, 1871, Prof. A. J. Aitken Meigs, President, in the chair,

DR. GOODELL opened the discussion by exhibiting Barnes' dilators, and a curved forceps, which he had devised for reducing them to the smallest compass and for introducing them into the os uteri. The pocket added to these bags was therefore not only unnecessary, but operated disadvantageously by increasing their bulk. After their introduction one finger should be kept upon the edge of the os, so as to be sure that they neither slip into the uterus nor into the vagina during the process of distention. He spoke at length of the advantage he had derived from these dilators in cases of tedious dilatation of the os, arising either from rigidity of the cervix, the early escape of the waters, or from contraction of the conjugate diameter, which prevented the head from bearing upon the soft parts. In abortion, when the membranes remain behind, they are invaluable, as well as in those cases in which convulsions set in at the outset of labor, before the os uteri is dilatable. In placenta prævia not only do these bags very effectually control the hemorrhage, but serve also to dilate the os, so as to facilitate the process of version. They are useful in arousing the uterus to action in cases of inertia not due to exhaustion. Finally, without pretending to enumerate all the puerperal conditions in which these bags are efficacious, the doctor thought the members of the Society would find them of great value in all cases of labor in which

humanity or necessity demanded the speedy dilatation of the os uteri.

DR. ESHELMAN asked Dr. Goodell whether he did not believe that in cases of placenta prævia the forceps could be introduced earlier, with an os less dilated, and delivery effected sooner by their use than by turning. This was his experience. He usually finds on arrival, or after tamponing and dilating with the colpeurynter, a free edge of the placenta, by the side of which he introduces the forceps, and by traction makes the head, as in natural labor, dilate the womb, and at the same time so compress the placenta and the open sinuses of the uterus as to prevent hemorrhage. He has never found fetal life survive the first copious hemorrhage in central implantation, but in partial implantation the child may be saved.

DR. GOODELL, in reply to Dr. Eshelman, stated that in central implantation of the placenta he had designedly laid down the rule of *version* for the guidance of the general practitioner, because few resorted to the forceps before the os was fully dilated, and the child was usually lost, whatever the treatment. At the same time, he had repeatedly applied the forceps when the os could only admit the cone of his fingers, but deemed it a hazardous practice in placenta prævia. He objected to the forced introduction of the forceps, and to the forcible dilatation of the os uteri by subsequent traction on the head, as recommended by Dr. Eshelman in these cases, because injury might be done to the excessively vascular and hypertrophied cervix, whereby metritis or blood-poisoning would be apt to result, either directly from the damage sustained, or indirectly from the absorption of the lochia, which must then pass over an abraded surface. On the other hand, the pressure exerted by the bags was uniform, and so safely graduated that no such accident could possibly occur, while the physician is left free to resort either to the forceps or to version, as he may deem best.

DR. HAMILTON said the allusion by Dr. Goodell to cases of very slow and difficult dilatation of the os uteri, caused sometimes by insufficient antero-posterior diameter of the pelvis, or unusual size of the head of the child, suggested a case he had lately attended. The patient, about twenty years of age and well formed, had been in labor, when first seen, at 8 P.M., about twelve hours, during the latter half of which the pains had been very frequent and severe. It was the first parturition, and an examination, rendered difficult by the contracted condition of the external parts, showed no dilatation of the uterus, but, on the contrary, a remarkable narrowness of the os tincæ, the edge very thin, no vestige of the neck remaining; so that careful touching and some little time were required to determine its location. Regarding the case as one of perverted or irregular movement of nerve-power, rather than of mechanical difficulty, and with a view to afford some temporary relief of the fruitless suffering, or to effect some change in the condition of the uterus, a teaspoonful of the solution of morphia was given, with direction to repeat the same, if necessary, every hour, until three doses had been taken. Next day, at 4 A.M., he was sent for, and found on arrival that no change had occurred in the state of the uterus; but the pains had become frequent, and were gradually increasing in strength. At 9 A.M., found no change in the os tincæ, although the pains had increased in severity. A dose of castor-oil was directed. At 2½ P.M., he saw her again, and learned that the bowels had not been moved, the oil having been rejected, and on examination could scarcely determine whether a very slight relaxation had taken place or not. The pains had continued up to this time regularly and with increased power. A dose of magnesia was now given, with direction to administer, if necessary, in two hours an injection. Just before 6 P.M., made another visit, when he was informed the bowels had been well moved two or three times. On examining, he was surprised to find the head pressing upon the perineum, entirely without the uterus, and the external parts so perfectly relaxed as to promise a speedy delivery, which in fact took place in less than an hour afterwards. Thus it will be seen that the patient, after having suffered about twenty hours (during fourteen of which the pains were of extraordinary frequency and force) without a perceptible change in the condition of the parts concerned in parturition, was at length favored with so sudden and perfect relaxation as to permit the completion of this act

in a space of time much shorter than is frequently required in cases pursuing a more normal course. Whether the action of the purgative was, in this case, the efficient agent in developing a more favorable movement of the powers pertaining to parturition, is not certain, although quite probable in view of the advantage so often obtained in similar cases by this means. A question of primary importance in this connection is the mode of determining the various causes capable of producing the persistent contractions alluded to, and the appropriate methods of management.

DR. GOODELL, in answer to Dr. Hamilton, remarked that in multiparæ his usual habit was to rupture the bag of waters so soon as the os was dilated to the size of a door-knob; but that it was often a very nice point to determine when to do so in the earlier stages of labor, especially in primiparæ. For instance, it was no easy matter to decide whether the cause of delay in the dilatation of the os was due to a large foetal head, to slight contraction at the brim, to some other obstacle to engagement, or to either an excessive or a scant amount of the liquor amnii. In these doubtful cases he had adopted a plan which, although not infallible, had often served him a good turn. Whenever the os dilated slowly, he hooked down the cervix with one finger in the os; and if then, during a pain, the membranes did not bear firmly upon it, he argued that they were doing no good, and accordingly ruptured them. Again, if the membranes continued to remain so closely applied to the head as to be with difficulty appreciated, he invariably ruptured them. On the other hand, if he had drained off the waters under a mistaken idea that they were in excess, the error could be promptly rectified by the dilators, which were in fact more efficacious in expanding the os than even a well-developed bag of waters.

DR. ESHELMAN thought that in Dr. Hamilton's case the thin rim was mucous membrane, as in a similar case he had found the muscular band above and more widely dilated. He was undecided as to the more desirable course, having tried both methods, yet he thought it was not likely that the uterus would be much affected by evacuating the waters when they were scanty.

DR. BURNS thanked Dr. Goodell for his very clear exposition. He had recently been very anxious with regard to a primipara, aged twenty years, with rigid os and vagina, who was taken with convulsions at three o'clock A.M., before the slightest dilatation had occurred. Her countenance became livid, her breathing stertorous, and she frothed at the mouth. Fearing death at so early a period in the labor, he commenced to dilate by means of one or two fingers during the intervals of pain, hoping to secure sufficient dilatation to admit the introduction of the forceps. After some time the os admitted the index finger. The convulsions continued at intervals, and were terrific. To save the brain, he opened a vein and took about twenty ounces of blood, keeping her at the same time under the influence of ether. In two hours there was marked progress, but the convulsions continued. She was again bled twenty ounces more, and he gave her one-third of a grain of acetate of morphia hypodermically. As the uterus was already dilating well, he gave more liberty of action to the uterus by rupturing the membranes. This was followed by greater descent of the head. The os, wire-like, encircled the head so closely that he was unable to introduce the forceps. Expulsive efforts now came on, and by the aid of the finger the os was pushed over the head. The forceps were then readily applied and the child delivered. The child was dead, and had probably died during the first convulsions. During her labor forty ounces of blood were drawn, twenty-four ounces of ether used by inhalation, and one-third of a grain of the acetate of morphia was used by hypodermic injection. She had fifteen violent convulsions up to the close of labor, none afterwards. On the third day after she was still unconscious of her confinement. Dr. Burns stated that he had used his fingers as dilators for thirty-two years, and successfully, but believes that he might have often succeeded better with the dilators mentioned by Dr. Goodell. In placenta prævia and abortions they would no doubt be useful by acting as hæmostatics as well as dilators. He said that probably Dr. Hamilton's case might be explained by the circumstance that the first stage of the labor was tardy and the second stage unusually rapid, which is sometimes the case.

Dr. B. also spoke of a case of prolapsed bladder occurring in his practice a few years ago. The labor was advancing quickly, when an examination revealed a tumor filling the vagina, but no os could be detected. Ascertaining that she had not passed water for some time, and having no catheter, he finally obtained, after some difficulty, a quill from the wing of a turkey, from which a catheter was made, and the bladder evacuated. In twenty minutes delivery was accomplished. In placenta prævia Dr. Burns considered it difficult to deliver by the forceps; it required too much time. He always introduced the hand and arm, and delivered by turning.

DR. HAMILTON remarked that, in reference to the advantages of an earlier or later rupture of the membranes, he could not say much of a positive character. As a general rule, he was inclined to think a too early evacuation of the waters is recommended and practised. Wherever the membranes are very tough, they should at the proper moment be broken; otherwise the labor may be greatly protracted. The experience of members on this subject was desirable.

DR. BUCK said that Dr. Knight had used a solution of one part of Monsel's solution to four of water, throwing it directly upon the detached portion of the placenta, in placenta prævia, with a Davidson's syringe. He thought that Monsel's solution has also been found to control the hemorrhage absolutely in several cases which had occurred in the practice of other physicians in this city. In these cases the forceps should be applied as soon as possible and the child delivered.

DR. PRALL asked Dr. Goodell how he disposed of the placenta in a case of central implantation;—whether he delivered the placenta first, and then the head, or delivered the child through a rent made in the centre of the placenta, or pushed the placenta to one side and applied the forceps to the head. He was taught to turn and deliver in all cases, as soon as the hand could be introduced through the os past one side of the placenta, but would like to know which procedure would be considered good practice at the present day.

DR. GOODELL replied that before the introduction of the bags it would first be necessary to strip up the placenta from around the cervix as far as the finger would reach, in order both to make room for them, and also to facilitate the dilatation of the os, which would otherwise be much impeded by the presence of such a splint as the attached placenta. In placenta prævia he would rupture the membranes early, so that the head might bear firmly upon the cervix and compress the bleeding sinuses, resorting to the dilators if this plan failed; but in central implantation he would much prefer to leave the membranes intact and rely upon the dilators, lest a concealed hemorrhage should take place and a fatal amount of blood should replace the evacuated liquor amnii.

DR. TAYLOR said that in the month of September, 1862, he was engaged to attend a patient during her second labor. For a few months previous she had had frequent but slight uterine hemorrhages, unattended, however, with pain. The period of utero-gestation would not expire until the next month, yet the hemorrhage came on so profusely, and was accompanied with so much pain, that, being alarmed, the patient sent for him. He found the os uteri dilated to the diameter of one inch, and covered with the placenta, which was bleeding with every pain. Having tamponed the vagina, he waited until he supposed the os was sufficiently dilated to introduce the hand, when he detached a portion of the placenta from the posterior lip of the uterus, discovered the membranes above, ruptured them, and found the hand and foot of a small child presenting. He brought down the feet and body, followed by the arms and head. During the labor he was obliged to sustain the mother by stimulants.* In rigid os, when wire-edged and the parts are tense and dry, the labor is always tedious. If the pulse is full, and a dose of opium does not relax it, he depletes, when dilatation generally occurs. He had tried the application of the extract of belladonna to the os, but considered it of no value. He did not often rupture the membranes, allowing them to act as dilators as long as possible. In one case, however, he found them so tough that he was obliged to cut them with the lancet. He had had no experience with Barnes' dilators; his fingers had always proved sufficient.

*This case is reported in *The American Journal of the Medical Sciences* for January, 1863.

REPORT OF THE PROCEEDINGS OF THE PATHOLOGICAL SOCIETY OF PHILADELPHIA.

AT a stated meeting of the Pathological Society, held Thursday, April 13, the President, John Ashhurst, Jr., M.D., in the chair,

DR. WM. PEPPER presented the specimens from a case of *extensive invagination of the ileum, cæcum, ascending and transverse colon*, occurring in an *infant* six months old, which, during the last two months of its life, had taken, twice daily, in addition to the breast-milk, two teaspoonfuls of Nestlé's Lacteous Farina in a gill or more of cow's milk. Dr. Pepper read a paper in connection with the subject, which will be published in full in a subsequent number of *The Medical Times*.

DR. R. M. TOWNSEND exhibited a specimen of *congenital multilocular cystic tumor*, which he had removed from the neck of a boy, aged ten years, from Iowa. When he was five months old, a blue spot about the size of a five-cent piece was noticed immediately above the centre of the right clavicle. This spot merged into a tumor which had so increased in a year as to fill up the side of the child's neck. This first tumor was pronounced an aneurism; and, compresses being applied, it disappeared.

The second tumor was first noticed by the mother when the child was one and a half years of age. Its growth has been somewhat irregular, since it appeared at times to diminish, then remained stationary, and at other times rapidly increased. Increase in bulk was especially noticed for a few weeks immediately preceding the operation.

The tumor was ovoidal in shape, lobulated, of the size of an ordinary orange, and was translucent by transmitted light. It was soft, elastic, fluctuated under pressure, and extended from the angle of the right jaw to within one inch and a half of the inner third of the clavicle. It overlaid the sterno-cleido-mastoid muscle, and extended from the inner edge of that muscle half-way to the median line of the neck.

On dissection, which was tedious from the close connections of the tumor, it was found to be seated beneath the platysma myoides muscle, and to involve the deep cervical fascia to such an extent as to require exposure of the fibres of the sterno-cleido-mastoid muscle, the carotid vessels, and the facial vein.

It contained about four ounces of straw-colored serum, and consisted of a multitude of cysts which freely communicated with one another. Its inner wall was highly polished, resembling serous membrane, and presented a columniform arrangement not unlike that seen in the cardiac auricles.

With the exception of a mild attack of erysipelas, the boy progressed rapidly to recovery.

DR. S. W. GROSS exhibited, in connection with this case, a number of photographs of cystic tumors.

DR. J. H. HUTCHINSON presented the specimens from a case of *jaundice from compression of the ductus communis choledochus*, and read a history of the case, which will be published in the next number of *The Medical Times*.

DR. HUTCHINSON also exhibited the specimens from a case of *recent peritonitis and pleurisy attending albuminoid spleen, liver, and kidneys*.

The patient, a factory-hand, aged sixteen, had been healthy up to his eleventh year. In his twelfth year he had noticed "lumps" on the side of his neck. On admission to the Pennsylvania Hospital there were cicatrices at the angles of both jaws, in both groins, at inside of left thigh, at junction of clavicle and sternum, and two immediately under left axillary space. (Edematous swelling of legs began two months before admission. (Edema of penis and scrotum was present on admission; also some ascites.

The urine was feebly acid, sp. gr. 1022, clear straw color, albuminous, and contained abundant hyaline casts: 32 oz. were passed in twenty-four hours. Subsequently the quantity diminished, but, infusion of scopolium being prescribed for him, it was again increased.

At the *post-mortem* examination the *cellular tissue* was generally infiltrated with serum; the *intestines* were everywhere agglutinated by recent *cacoplastic lymph*; the *liver* was enlarged in its right lobe, firm, and appeared mottled on the

addition of iodine; the spleen was much enlarged, its tissue firm, and on section small whitish bodies were seen. The kidneys were enlarged, the left very much so, the tissue firm, the relation of cortex to cones normal: iodine produced mottling.

The specimens were referred to the Committee on Morbid Growths, who reported, April 28, as follows:—

"The specimens from the case of long-continued suppuration, presented by Dr. Hutchinson at the last meeting, have been carefully examined by your committee, and it was found that the kidneys, spleen, and liver all showed slight but distinctly recognizable traces of amyloid infiltration. In the kidneys it was principally the Malpighian corpuscles which were the seat of the deposit; in the spleen, the small arteries. In both these organs the iodine test gave a mahogany red to the affected parts, which subsequently turned to a purple, and finally black, under subsequent treatment with sulphuric acid. The intestines and stomach were, unfortunately, not preserved for examination."

DR. S. W. GROSS presented specimens illustrating *acute cystitis and pelvic cellulitis, consequent upon an attempt to crush a vesical calculus*.

A gentleman, seventy-one years of age, had suffered for eighteen months with symptoms of vesical calculus, of which the most distressing was the very frequent call to make water, he having been obliged to perform that act every half-hour. Examination with the sound and the finger in the rectum disclosed a stone, with fasciculated bladder and hypertrophy of the prostate gland, affecting more particularly the right lateral lobe, so that the beak of the instrument deviated to the left side of the patient. On the 30th of March, under chloroform, Dr. G. attempted to seize the calculus with the lithotrite, but failed to do so after gentle manipulations, which were not protracted beyond five minutes. The operation was attended with trifling hemorrhage, a full opiate was administered, and he was put to bed with hot bottles to his feet and fomentations over the hypogastrium.

Four hours subsequently the patient was seized with a chill, and he was unable to retain his urine, which was bloody, for more than fifteen minutes at a time. On the second day there was supra-pubic tenderness, with fever, great thirst, and a pulse of 120. On the following day there was some tympany, with aggravation of the pain; the patient's face had a pinched expression, and was bedewed with perspiration. Up to the time of his death he continued to pass bloody urine every quarter of an hour, and his sufferings were intense. He sank exhausted on the morning of the fifth day after the operation.

The previous history of this case is interesting. During the latter part of September, 1867, the patient consulted Professor Gross on account of urinary calculus, which was readily detected by the sound; but the symptoms rather pointed to serious disease of the bladder and kidneys. He had a worn, emaciated appearance, his general health was much impaired, his appetite was indifferent, and his rest was disturbed. His sufferings were intense, notwithstanding the exhibition of anodynes, both by the mouth and by the rectum. He was obliged to pass his water very frequently,—sometimes every ten or fifteen minutes,—and, what is remarkable, as soon as he relieved himself he felt the same desire. The slightest pressure above the pubes gave pain, and the urine contained certainly one-third of pus and fibrinous material.

Under appropriate treatment, continued for three weeks, the symptoms were alleviated, and the quantity of pus passed was very greatly diminished. On the 12th of October Professor Gross performed the lateral operation of lithotomy. The perineum was deep, but the prostate gland was not enlarged. Two uric acid calculi, which weighed respectively 462 and 490 grains, were removed, and during the extraction of the second stone a prostatic glandular tumor came away in the grasp of the forceps in advance of the calculus. Recovery was very slow; masses of lymph, encrusted with triple phosphates, frequently came away, and closure of the wound was delayed for upwards of two months.

The glandular tumor was round, of the size of a hazel-nut, dense, firm, and elastic, enclosed in a well-defined capsule of fibrous tissue, homogeneous in appearance, and homologous with the structure of the prostate gland.

Post-mortem inspection disclosed cellulitis of the front and sides of the bladder, which had extended up behind the recti muscles as high as three inches above the symphysis pubis. The bladder contained a uric acid calculus which weighed ten drachms. Its mucous coat was injected, and discolored brownish-green, and it was encrusted, particularly at the trigone, with patches of adherent fibrin. The muscular coat was somewhat hypertrophied, and presented a columniform appearance. Several sacculi also existed, one of which, seated just behind a point midway between the entrance of the ureters, contained a calculus of the size of a small hazel-nut. The orifice of this diverticulum measured about one-fifth of an inch in diameter. The right lobe of the prostate gland was enlarged to at least eight times its normal volume, and two mammillated sessile prominences were prolonged from it into the bladder. The posterior portion of the left lobe was converted into a pouch of an ounce capacity, the fibrous capsule of the gland alone remaining. The anterior portion of the lobe remained, but it was much hypertrophied. The ureters were dilated for several inches beyond their termination at the bladder, and the kidneys were greatly congested.

It is interesting to note in connection with this case the effect of the removal of the glandular prostatic tumor, a line of practice urged by Sir William Ferguson to relieve the distress of enlarged prostate. In an article contributed to the *London Lancet* for January 1, 1870, he says, "As the entire wound in lithotomy most generally closes by granulation, the very removal of such well-nigh isolated masses will leave less surface for inflammation, suppuration, and granulation. If allowed to remain, it is not likely that they will adhere to their former site by immediate union; if they do not, a larger surface must be exposed to the irritating influence of the urine, and a double suppurating and granulating surface must be left." These views are not borne out by the present example. A much larger surface was left for inflammation, granulation, and suppuration; and instead of the comparatively small cavity left by the removal of the growth having filled up, it progressively increased in size until a large pouch was formed, the existence of which doubtless increased the difficulty in voiding urine, besides aggravating the symptoms due to an inflamed bladder and hypertrophied prostate.

DR. F. F. MAURY presented *calculi, sacculated bladder, and enlarged prostate from a patient dying of peritonitis after the operation of lithectomy*.

DR. H. C. WOOD exhibited the *heart and pericardium from a case of pericarditis*.

DR. W. J. PORTER presented *enlarged glands from each side of the aorta in the vicinity of the liver, ulcer of the stomach, fatty liver, tumors of the uterus, cyst of left ovary*.

The specimens, through the kindness of Dr. Thomas Wistar, were obtained from an old woman seventy-seven years of age, and for several years past an inmate of one of the asylums in this city. No medical history could be obtained.

The post-mortem examination was made on the 27th of March, about twenty-four hours after death. On opening the abdomen, about eight or twelve ounces of serous fluid were found. The liver was of very peculiar form and very fatty in appearance. The gall-bladder was distended with gall-stones, and its walls much thickened. The glands on either side of the aorta were very much enlarged and apparently cancerous. The pancreas, in parts, was similarly affected.

At the pyloric extremity of the stomach a large, malignant-looking ulcer was found, but there was no thickening or obstruction of the pylorus. The kidneys and spleen were both healthy.

The uterus was normal in size; the cervical canal was filled with a thick, tenacious, colorless mucus. The cavity contained three small tumors—one, the larger, about the size of a large pea, attached to the right side by a rather thickish pedicle; the others, on the opposite side, much smaller, about the size of a grain of wheat, and without a pedicle. These tumors, before they were changed by the action of the alcohol in which they have been preserved, presented in a marked degree the characters of the cellular-vascular vegetations described by Thomas in his work on "The Diseases of Women," in the article on Menorrhagia. On the posterior surface of the uterus, externally, two small tumors were found, one hard, and re-

sisting the knife, the other easily cut; on the anterior surface, a little to the left side, another little tumor, fibrous on section, was found. The right ovary was apparently healthy. The left had a small cyst, the fluid contents of which readily disappeared into the ovary on pressure.

The specimens were referred to the Committee on Morbid Growths, who reported, April 28, as follows:

"The vagina and uterus have both undergone senile atrophy. The cavity of the uterus, which is sharply anteflexed, measures two inches. This specimen illustrates the growth and development of the various forms of polypi of the uterus. Into the canal of the cervix there project numerous large Nabothian glands, one of which is provided with a short pedicle, while another is imbedded deep in the parenchymatous tissue, and forms a 'retention cyst' the size of a small cherry.

"On the posterior wall of the uterus are two broad, flat, slightly elevated portions, consisting of small cysts formed by the closure of the uterine glands, surrounded by a slowly proliferating connective tissue, presenting the form which has been compared by Virchow to molluscum as developed in the glands of the skin. Near the right Fallopian tube the growth has been more rapid, and a mucous polypus the size of an almond projects into the cavity, consisting of a conglomerate of small cysts, the largest of which is not the size of a pea. Under the microscope a delicate ground-work of waving bundles of connective tissue holds loosely together small cysts lined with an epithelium, generally pavement in character, but presenting great variety in shape and size. The supply of blood-vessels is abundant; the walls, however, of the arteries which ramify on the exterior of the growth (from which part alone the section was made) are very thin and delicate. The contents of the cysts consist of epithelium, colloid masses, pus cells, and detritus. The lining membrane has lost its character as a mucous membrane, and is smooth and glistening, closely resembling a serous membrane.

"On the posterior wall of the uterus there are two small fibroids, one of which has undergone calcification.

"Both ovaries are contracted by fibrous degeneration, and in the left several small simple cysts are found."

MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA.

At a meeting held January 3, 1871, the President, Dr. J. M. Toner, in the chair, DR. LOUIS MACKALL, JR., read the history of the following case of *rupture of the uterus,—delivery by turning, the child still-born, and death of mother:*

"Harriet —, a stout, obese colored woman, gave birth, on the 9th of March, 1868, to twins. In August, 1869, she was delivered again of a still-born child, which was supposed to have reached 7½ months. On Thursday evening, December 28, 1870, labor-pains set in, but she did not call in a physician until Friday morning. At this time Dr. Appleby visited her; labor-pains feeble, and os uteri undilated; at 12 A.M. full dilatation of the os, but pains still weak; no material change until three P.M., when symptoms of exhaustion were manifest. Dr. Peter and myself saw the case between six and seven P.M. At this time she was in a state of collapse; pulse feeble and rapid; skin cold. Upon inquiry, she stated that she had had no pain since three o'clock, but complained of some tenderness when pressure was made over the abdomen. There was and had been no hemorrhage; but vomiting had set in at three o'clock, and was still persistent. On examination, the os was found completely dilated. The face was engaged in, but had not passed, the upper strait. It was very apparent that the conjugate diameter was very considerably less than normal, owing to a great prominence and jutting of the promontory of the sacrum.

"Turning was decided upon; and, accordingly, I passed my hand, without difficulty, by the side of the child's face, and found that the uterus was ruptured posteriorly. The feet of the child were reached without difficulty, and brought external to the vulva. The arms were also brought down, but great effort was required to pull the child's head through the contracted brim.

"The woman bore the operation better than could have been expected in her extremely prostrate condition. A teaspoonful of laudanum was administered, and stimulants freely given. Reaction took place during the night. Her pulse, on the fol-

lowing morning, was 120 per minute, and of good volume; the abdomen was greatly distended, and there was some tenderness on pressure; vomiting continued. Laudanum, in teaspoonful doses, every six hours, with brandy and beef tea, was the treatment adopted.

"On Sunday, the third day, she was evidently much worse; pulse 138, and very feeble; countenance hippocratic; abdominal tenderness not marked. As everything, whether medicine or nourishment, was immediately vomited, ½ grain of morphia was administered subcutaneously, followed in four hours by another injection of ¼ grain; she had no further return of pain or vomiting, but she continued to sink, and at six o'clock P.M. died.

"A *post-mortem* was made by Drs. Appleby and Kleinschmidt sixteen hours after death. The abdominal cavity was found to be distended by fluid blood; the evidences of acute peritonitis were everywhere apparent. The uterus had not contracted, and a large rent, capable of allowing the passage through it of the child, was found in the posterior portion of the body of the organ. There was decided deformity of the pelvis: the conjugate diameter measured only three inches. The contraction of the antero-posterior diameter was found to be due to the great prominence of the promontory of the sacrum, and to a spinous ridge projecting from the os pubis."

After the reading of the paper, the following discussion ensued:

DR. LIEBERMAN asked the question, whether the life of the child might not have been saved by Cesarean section.

DR. MACKALL believed the child to have been dead; authorities do not recommend the operation, under the conditions existing in the case as reported, unless delivery cannot otherwise be effected.

DR. J. P. THOMPSON, in considering the operation from a surgical point of view, thought that Cesarean section involved less danger to the patient than turning, and was to be preferred even in the event of the death of the child. Section of the abdominal walls gave the opportunity for the removal of the coagula and *débris* from the peritoneal cavity, thus diminishing the chances of an unfavorable result. In turning, there was the additional danger of peritonitis from the injury done to the intestines in dragging the child through the rent in the uterine wall.

REVIEWS AND BOOK NOTICES.

INSANITY AND ITS TREATMENT: LECTURES ON THE TREATMENT, MEDICAL AND LEGAL, OF INSANE PATIENTS. By G. FIELDING BLANDFORD, M.D. Oxon., F.R.C.P.L., and Lecturer on Psychological Medicine at the School of St. George's Hospital, London. With a Summary of the Laws in Force in the United States on the Confinement of the Insane. By Isaac Ray, M.D. 8vo, pp. 471. Philadelphia, Henry C. Lea, 1871.

With so good a book before us as Dr. Blandford's Lectures, which, in an abridged form, were delivered at the School of St. George's Hospital, but, as Dr. Sibbald informs us, without clinical illustration, we cannot avoid being restive. Shall we ever be allowed careful scientific teaching of insanity? And we respectfully ask how much longer graduates, to the number of a thousand, will be turned out every March into the full practice of medicine, with but didactic ideas of mental disease? We have no record of the percentage of attendance upon Dr. Blandford's lectures, nor of the good results realized; but when we read, "I now publish them, with the hope that they may serve to some extent as a handy-book concerning insanity," we sincerely regret that the doctor could do no more for his students, and earnestly commend this book to them when their first clinical opportunity arrives in the care of a patient of their own.

A cordial welcome is due to Dr. Blandford's book, as being a most grateful addition to the literature of psychological medicine. The argument is well given in the preface: "The only method by which we shall attain an insight into the mysterious phenomena of unsound mind, is to keep ever before us the fact that disorder of the mind means

disorder of the brain, and that the latter is an organ liable to disease and disturbance like other organs of the body, to be investigated by the same methods and subject to the same laws." The first two lectures are devoted to the most recent physiology of the healthy mind. We are told with familiar clearness that "infants are not born with ideas and knowledge. The brain they inherit, but their acquisitions must depend on its healthy working, and on their surroundings and opportunities of receiving ideas." Here we find suggested the entire range of mind,—its success or failure in intellect, emotions, or will, as well as the great powers of hereditary and social influence. The doctor discards the old division of mind into intellect, emotions, and will, and states that to feelings alone are all things due,—either intellectual, æsthetic, or religious. And his requirements for the healthy working of brain and nerve are such as send us to Lecture XVIII. on the treatment of insanity, and also to Lectures IX., X., XI., XII., which describe clinically certain cases coming to our notice in ordinary practice. The lectures upon the pathology and morbid appearances of insanity, in our Esquiroi days, would have been invaluable to us. We should hardly have tried to classify some five hundred patients in a hospital for the insane, or so eagerly sought for the dislocated colon and so utterly failed. As we recall our struggles with delusions, illusions, hallucinations, etc., we feel how much the lectures upon the false beliefs and acts of the insane would have aided us!

A most valuable Lecture, XX., is entirely taken up with the examination of patients, both for their proper medical treatment and for legal purposes, and we desire to express our gratitude to Dr. Blandford for not giving us a definition of insanity as an entity, having in mind certain routine legal questions and well-remembered scenes in our courts. We feel confident, however, that, when cited as an expert, due respect is paid to his testimony.

That there are defects and imperfections in Dr. Blandford's "handbook" we perceive, but we can assure every one that most valuable hints may be obtained from it when called upon to treat insanity or to take reluctant steps for placing insane patients under legal restraint.

Although we should have preferred the shape and flexible cover of the Edinburgh edition in Mr. Lea's handsome American edition, we give him our thanks. The Appendix, by Dr. Ray, supplies a positive want, and is a happy thought.

MINNESOTA AS A HOME FOR INVALIDS. By BREWER MATTOCKS, M.D., President of the Board of Health, St. Paul. 12mo, pp. 200. J. B. Lippincott & Co., 1871.

SECOND ANNUAL REPORT OF THE STATE BOARD OF HEALTH OF MASSACHUSETTS. Senate Doc. No. 50. January, 1871.

Although one of these volumes is written with the evident purpose of eulogizing a special climate, and the other is an official state paper, we may consider them together as giving an insight into the hygienic and sanitary conditions of two great and flourishing Commonwealths. Perhaps no more decided contrast could be furnished, as to age, geographical distribution, and general development, than the remote States of the East and West, the venerable Massachusetts and the youthful Minnesota. In the former, the Legislature two years since instituted a "State Board of Health," with the view of thoroughly systematizing sanitary statistics as they were recorded in the various towns, and of comparing them for purposes of general information and advantage. This plan might be adopted with benefit in other States, and we would then in time have a great national health-bureau formed from the separate State organizations,—a reliable congress of earnest co-workers in the great cause of human health. The questions discussed in the Massachusetts report are interesting to the people at large, and to physicians more than to any other class, such as lead-poisoning, trichiniasis, malignant vesicle, the health of towns, typhoid fever, alcoholic drinks, mortality, homes for the people, health of minors in factories, etc. We think it might be made a much more valuable document, if, instead of giving small disconnected paragraphs, many of which are of only trivial moment,—in regard to the health of towns, for example,—it would, another year, classify the information thus afforded, so that it may be definitely known whether the same general influences pervade large tracts of country and simultaneously affect the health of thousands.

Quite an extensive correspondence with United States representatives abroad, and others, is included in this report, embracing many interesting facts relating to the use of stimulants in foreign countries.

The little volume on Minnesota devotes sixty-four pages to the causes, curability, etc. of consumption, before coming to the foregone conclusion that Minnesota is well adapted for its cure. "As we write," says the author, "we feel a certain enthusiasm in dwelling on a health-resort, bounded only by latitude and longitude, called by a soul-inspiring name, 'the great Northwest.'" Dr. Mattocks remarks also that the climate of Minnesota is strictly a tonic climate, tonic in the broad full sense of the term; but as tonics sometimes irritate slightly, and we have perhaps for a few days to discontinue them, so with the climate of Minnesota. "And yet," remarks the writer, "why should the air be irritating? It is nothing but pure air; it is an air which is comparatively free from miasm, because we are so far north; it is free from fine particles of salt, because we are so far from the coast; it is free from moisture, for we are so far inland." We might be tempted to give some of the facts of local interest connected with this flourishing new State and its metropolis, St. Paul, but those who wish specific information will probably obtain the little work, which they will find a handbook of general and statistical knowledge in regard to this popular health-resort for consumptives.

ANNUAL REPORT OF THE SUPERINTENDENT AND PHYSICIAN OF THE NEW YORK STATE INEBRIATE ASYLUM at Binghamton, for 1870. Albany, 1871.

This report of Dr. D. G. Dodge is interesting to the profession on account of the general recognition at the present day of the fact that alcoholism is a positive disease, and not merely a habit. As such it is within control, its treatment being based upon a just appreciation of the effects of alcoholic poisoning on the system. Since the opening of this institution, May 1, 1867, 774 patients have been admitted; but the report neglects to state how many of these were cured or died. Of 220 cases admitted in 1870, the married and single were about equally divided; the youngest was 20 years of age, the oldest 75. We are sorry to see four physicians and one clergyman among the number. The Asylum seems to be excellently arranged and efficiently conducted.

PHILADELPHIA MEDICAL REGISTER AND DIRECTORY. Edited by JOHN H. PACKARD, M.D., Secretary of the College of Physicians of Philadelphia, 1871. 18mo, 334 pp. Philadelphia, Collins, Printer.

The profession at large is for the second time indebted to the care and industry of Dr. Packard for the issue of this valuable little work. We shall be glad to give it an annual welcome, as we believe its periodical appearance will speedily become a matter of absolute necessity. The changes in our hospitals, medical colleges, societies, etc., and in the addresses of our resident physicians, although seemingly slight and trivial at the moment, are in the aggregate of a year quite numerous and even important. A directory, therefore, soon falls behind the standard of complete accuracy, and needs rejuvenating at very frequent intervals. If we glance, for instance, over the pages of the first edition of this excellent manual of local medical history and statistics, published in 1868, we are forcibly struck with the alterations demanded on every page; and considering the work as one urgently needed by the profession, and admirably adapted to its wants, we believe, with the editor, that "a new edition, with the changes and additional matter rendered necessary by the lapse of two years, will meet with a like cordial welcome." While recommending Dr. Packard's Directory to every member of the profession here and elsewhere, in the State and out of it, as a volume rendered invaluable by its accuracy of details, completeness of local information, and usefulness for daily reference, a synopsis of its contents will afford the best idea as to its character. We find treated with every necessary minuteness the objects and characteristics, lists of officers, members, etc. of 13 medical associations, 9 medical schools and kindred institutions, 18 hospitals, 9 dispensaries, and 46 charitable institutions; and among the miscellaneous matters, to which nearly 150 pages are devoted, copious extracts from,

and references to, all the State laws affecting physicians, the fee-bill adopted by the College of Physicians, the regulations of the Board of Health as to births, deaths, the morgue, etc., the requirements of the U.S. medical services, lists of dentists, nurses, etc., a directory of over seven hundred of our city physicians, with their office-hours, a list of members of every county medical society in Pennsylvania, etc.

BOOKS AND PAMPHLETS RECEIVED.

Obstetric Report of the Charity Hospital to the Medical Faculty of the University of Louisiana, etc. By James Jones, Jr., M.D., Chief Obstetrical Clinic, Medical Department, University of Louisiana. 8vo, pp. 4. New Orleans, 1871.

Beneficial Results from the Use of Mechanical Appliances in Pott's Disease of the Spine, illustrated with Cases. By John A. Wood, M.D. 8vo, pp. 29. New York, 1871.

The Glykogenic Function of the Liver. Extracted from an Introductory Lecture to the Class of the Pennsylvania College of Dental Surgery, November 7, 1870. By James Tyson, M.D., Professor of Physiology and Microscopic Anatomy, pp. 6.

A Treatise on the Medical Jurisprudence of Insanity. By I. Ray, M.D. Fifth edition, with Additions, 8vo, pp. xvi, 658. Boston: Little, Brown & Co., 1871. For sale by J. B. Lippincott & Co.

Proceedings of the State Medical Association of Arkansas. Pamphlet, pp. 87.

GLEANINGS FROM OUR EXCHANGES.

RINGWORM CONTRACTED FROM A PONY.—Dr. Tilbury Fox, at the meeting of the Clinical Society of London for March 10, 1871 (*British Medical Journal*, March 25, 1871), showed cases of extensive and severe ringworm of the arms and hands in seven men, in whom the disease had been contracted from a white pony whose body was studded over with patches of tinea tonsurans, having characters analogous to those seen in ordinary ringworm of the scalp. The disease occurred only in those men who had groomed the pony,—in three men brought to Dr. Fox by Dr. Drage, of Hatfield, and who were the ordinary grooms of the owner of the pony, and in four others, attendants of the Royal Veterinary College, where the pony had been sent for treatment. The patches of ringworm were chiefly in the front of the arms; they were large, more infiltrated than usual, and, in one case, markedly herpetic. In one of the other cases the central portions of the circular patches were studded with minute pustules. Dr. Fox attributed the severity of the disease to a large amount of fungus of a very luxuriant kind being sown at one time upon the arms of the men. In one man parasitic sycosis was produced. Hairs taken from the pony, exhibited under the microscope, were seen to be ensheathed in spores and mycelial threads, both of which invaded the shaft of the hair; and scales taken from a patch on the arm of one of the men were also placed under the microscope, and showed the mycelium of the fungus, which Dr. Fox pronounced to be the trichophyton, sprouting in all directions throughout the epithelial scales. Dr. Fox had never before seen the transmission of ringworm from the horse to man, nor had Professor Spooner in his forty years' experience; but an epidemic occurred some years ago among horses and mules in the valley of the Borne in Savoy, and was reported upon by Professor Papa, in which a disease similar to that in the present cases was observed to be communicated to man from the horse. Bazin had also noticed the same occurrence. He remarked, however, that the transmission of tinea from the ox and calf to man was common enough. The seven cases illustrated the fact that ringworm of the surface varies considerably in aspect, according to the amount and rapidity of growth of the fungus, from a mere erythematous desquamating patch (so-called parasitic pityriasis) to a pustulating surface resembling and liable to be mistaken for an eczema; the two extremes being connected by transitional forms, represented by an abortive-herpes, a well-marked herpetic patch, or a desquamating circular area

bounded by an herpetic edge; the occurrence of so much effusion as is necessary to produce herpetic vesicles being dependent upon the amount of irritation set up. Veterinarians who asserted that "ringworm" was common in the horse, and might be communicated to man, had not brought forward any proof that the disease which they styled "ringworm" was really parasitic, and he had no doubt that many non-parasitic eruptions of animals were classed under that term. The disease in the white pony referred to was, as proved microscopically, undoubted tinea tonsurans. Dr. Fox replied to Mr. Erichsen, that there is no difference in the character of the fungus in man as compared with that of the horse, except that in the latter it is more luxuriant.

THE USE OF ACETATE OF POTASSA IN THE PRESERVATION OF MICROSCOPIC SPECIMENS. MAX SCHULTZE (*Archiv f. Mikros. Anat.*, Jan. 1871).—Among the various fluids which have been employed for the preservation of microscopic specimens, glycerin, either pure, or mixed with other ingredients, is the most widely used. Though undoubtedly of great value, it has decided disadvantages. For instance, many tissues when preserved in it become so excessively transparent that it is with difficulty that they can be distinguished; while, on account of its tendency to form compounds with the fats, we can no longer avail ourselves of the difference in the refractive power of the tissues depending upon the amount of fat which they contain, as a means of distinguishing the one from the other. Since osmic acid has been employed so successfully as a means of preserving the most delicate structures, a new objection has been brought forward against glycerin. If a mere trace of the osmic acid remains in the specimen which is to be preserved, the glycerin under the thin cover turns black, the discoloration beginning in the immediate neighborhood of the preparation, but gradually extending throughout the entire fluid. As there is no method of thoroughly removing the osmic acid from the tissues,—even washing them in water for several days having failed,—the preparation, unless transferred, gradually becomes absolutely useless.

Under these circumstances Max Schultze made a series of experiments to find some preservative fluid which would be free from these objections.

Doppel had employed for some years past a saturated solution of the acetate of potassa in the preservation of botanical specimens for microscopic demonstration, and had suggested its possible value as a medium in which animal tissue could be successfully preserved. This hint was acted on by Max Schultze, and for the past two years he has employed a saturated solution of the acetate of potassa with great success. The microscopic section is first placed in water or serum, and examined. If found to be worth preservation, a drop of the strong solution of the acetate of potassa is allowed to flow under the thin glass cover, which is not removed. After twenty-four hours it will be found that the solution of the salt has replaced the water which has evaporated, and the preparation is now ready for the cement. The fluid, however, does not evaporate or crystallize, so that it may be left without danger several days before finally sealing it up with the cement. This solution has nearly all the advantages of glycerin as a preservative fluid, and is not open to the objections which have been mentioned above. It has been employed for more than two years in Prof. Schultze's laboratory, by himself and his students, and is most warmly recommended by him to all those interested in microscopy.

SOLUTION OF SANTONIN.—Dr. John Harley (*The Practitioner*, Feb. 1871) gives the following formula for a solution of this ordinarily so insoluble remedy:

R Santonini, in pulvere, gr. xij
Sodæ bicarbonatis, gr. xx;
Aque destillate, ℥ij.

Put the soda and water into a flask, keep the fluid near the boiling point, adding, as it disappears, about two grains of the santonin at a time, until the whole is dissolved. Solution is effected in about half an hour, during which time the water is reduced to ℥ij. If need be, reduce by boiling to this bulk, when ℥ij will contain a full dose,—six grains of santonin. If an alkaline reaction be objectionable, neutralize with acetic acid.

TETANUS SUCCESSFULLY TREATED BY HYDRATE OF CHLORAL.—Dr. W. B. Cluness reports in the April number of the *Pacific Medical and Surgical Journal* a case of tetanus in which recovery followed the use of chloral. The disease was at first thought to be idiopathic, the symptoms having occurred shortly after the patient, who was perspiring and exhausted at the time, had taken a cold bath; but, upon careful examination, a ragged-looking sore, fully an inch in length, was found on the third finger of the left hand. After he had taken his third dose of eight grains, "the spasmodic contractions had, for a brief period, nearly ceased, and the tonic rigidity of the whole muscular system became perceptibly relaxed." Sleep was also produced by it, and the pulse fell from 128 to 88. The symptoms, upon their return, were again relieved, and the disease apparently was under the control of the remedy.

RETENTION OF PLACENTA.—Dr. Rossi states (*Ungar. Med.-Chir. Presse*, No. 47, 1870; from *London Lancet*, Feb. 18, 1871, p. 236) that in those cases of retention of the placenta where removal—especially after abortion—is impossible, he injects perchloride of iron into the uterus,—equal parts of water and the perchloride of iron. The placenta comes away piecemeal after such injections.

MISCELLANY.

The American Medical Association met at San Francisco on Tuesday, May 2, the President, Dr. Alfred Stillé, of Philadelphia, in the chair. The delegates, of whom between 300 and 400 were in attendance, were welcomed by Dr. Starr, of San Francisco.

A full account of the proceedings has not yet reached us; but the telegraph informs us that the subject of the admission of Female Delegates, although none were in attendance, gave rise to a lively discussion, which was continued until eleven o'clock on Friday night, when the meeting adjourned, leaving the question still unsettled. On Saturday the Association went upon an excursion down the Bay of San Francisco.

Dr. Henry A. Martin, of Boston, Chairman of the Committee on Vaccination, was removed for using insulting language towards the Association in an article on Vaccination which he published in *The Homoeopathic Journal*.

The first prize was awarded to Dr. E. R. Taylor, of Sacramento, for an essay on the "Chemical Constitution of the Bile," and the second to Dr. Benjamin Howard, of New York, for an essay "On the Direct Method of Artificial Respiration for the Treatment of Persons Apparently Dead from Suffocation, from Drowning, or from other Causes."

The following officers were elected for the ensuing year:—

President.—D. W. Yandell, M.D., Ky.

Vice-Presidents.—Thomas M. Logan, M.D., Cal.; C. Lives, M.D., Ala.; R. M. Mitchell, M.D., Ala.; J. K. Bartlett, M.D., Wis.

Assistant Secretary.—D. Murray Cheston, M.D., Pa.

Librarian.—F. A. Ashford, M.D., D. C.

Treasurer.—Casper Wister, M.D., Pa.

The Association will meet next year in this city.

APPOINTMENTS.—D. Hayes Agnew, M.D., Professor of Clinical Surgery in the University of Pennsylvania, has been elected Professor of the Principles and Practice of Surgery in the same institution, to fill the vacancy created by the resignation of Professor Henry H. Smith. It is understood that Dr. Agnew will continue, as heretofore, to deliver the lectures on clinical surgery.

Frederick D. Lente, M.D., has been appointed Professor

of the Diseases of Women and Children in the medical department of the University of New York. This divides the chair hitherto occupied by Prof. Charles A. Budd.

Mr. Matthews Duncan has been elected one of the consulting physicians of the Royal Edinburgh Hospital for Sick Children.

METEOROLOGICAL.—The month just passed proves to have been the warmest April on record in this vicinity since 1790. The mean temperature of the month was 58.15° F., while the average of the means since 1790 has been only 51.35°, and since 1825 only 52°. On the 9th the thermometer attained a higher elevation, 85.5°, than during the corresponding month in any year at least since 1841. The lowest mean temperature on record for April is 44 degrees in 1794 and 1798.

During April an unusually small quantity of rain fell, measuring in the aggregate only 1.82 inches, nearly one-half of the whole having fallen on the afternoon of the 27th. The average rain-fall of the month during the past thirty-four years has been 3.86 inches.

THE WARREN PRIZE.—We are glad to learn that the Warren Prize has been awarded to Dr. H. C. Wood, of this city, by the Physicians and Surgeons of the Massachusetts General Hospital, for a memoir on Nitrite of Amyl.

DEATHS OF PROFESSORS WAGNER AND NIEMEYER.—From the *British Medical Journal* we learn that among the victims whom the medical profession has furnished in connection with the recent Franco-German war, have been two men of more than common note,—Professor Albrecht Wagner of Königsberg, who died at Dole on February 15, and Professor Felix von Niemeyer of Tübingen, who has died lately at Nancy. The cause of death in both cases was typhoid fever, contracted in the discharge of their duty. Dr. Wagner was well and favorably known in Germany for his works on Resection and Regeneration of Bone (translated a few years ago by the New Sydenham Society), on Hydrophobia, Diabetes in connection with Carbuncle, Resection of Nerves, etc. The name of Felix von Niemeyer is well known among us through the translation of his excellent *Text-Book of Practical Medicine*, and his *Lectures on Phthisis*.

MORTALITY AMONG INFANTS.—At a meeting held in New York to effect a reorganization of the Infant Asylum and Foundling Society of that city, Dr. Willard Parker gave some interesting statistics. Among the 35,000 births annually in this city, about 2500, he said, are illegitimate, and about 3000 children are thrown away to be destroyed or got rid of in any way whereby the individual can be saved from the law. Out of 25,167 deaths in 1869, 7405 were of persons under one year of age,—equal to 27.4-10 per cent of all the deaths, and in 1870 to 31 per cent. In the Foundling Asylum at Montreal, out of 4059 received, 3767 died, or only 7 per cent. lived one year. On Randall's Island they save 10 out of every 100 when reared by hand, but with nurses 27½ per cent. are saved. When nursed by the mother, 70 per cent. are saved, while in rural towns 88 per cent. survive. From this Dr. Parker argued in favor of the country as the place to locate the Asylum, and against the separation of the child from its mother.

A NEW HOSPITAL for children has been established in New York City, under the auspices and care of the Sisters of St. Mary of the Episcopal Church. Drs. F. D. Lente, W. H. Carmalt, and Robert Watts are the attending physicians.

THE EDINBURGH PRIZES.—An Edinburgh prizeman writes to the *British Medical Journal* with reference to the prizes which it is announced were recently awarded to the female medical students at Edinburgh. As the paragraph in question was copied into *The Medical Times*, we also give the correction:

"In your impression of the 8th inst. it is stated that certain ladies gained prizes at the Medical School in Edinburgh at the close of the past session. This is quite true; still, I think the paragraph may mislead some of your readers not knowing the whole facts of the case. Dr. Watson, in his junior surgery class, gave separate prizes to the male and female students; so that the prizes gained by Isabel Thorne and Matilda C. Chaplin were competed for only by their female friends. In no competition with the males did the lady students succeed in obtaining a prize."

THE FRIENDS OF SMALLPOX.—It appears that a Mr. Henry Clark, who was committed to jail for fourteen days for non-compliance with the Vaccination Act, at Derby, in England, was received on his release from prison by bands of music and several thousand people with a large red flag carried in front. The *British Medical Journal*, in commenting upon this, says, "It is almost a pity that these several thousand cannot be allowed the luxury of a separate encampment, and of an epidemic of smallpox all to themselves. After a short time, we fear, the bands of music would be hushed, and the strong speeches take a different turn. We are just now suffering, in this and several great cities, a plague of smallpox, which we largely owe to the enthusiasm of the 'anti-vaccinationists.' If they would organize an isolated community for the voluntarily unvaccinated, and separate themselves from people who neither desire to infect others nor to be infected with that pestilence, it is possible that the smallpox and its friends would be in a short time simultaneously extinguished."

A NEW WORK BY PROF. JOSEPH JONES.—We learn with pleasure that Dr. Joseph Jones, Professor of Chemistry in the Medical Department of the University of Louisiana, is about to publish a work containing, in addition to other matter, "The Results of the Investigation of the Diseases of the Confederate Army during the American Civil War." The work will be issued as soon as a sufficient number of subscribers has been obtained.

A MOVE IN THE RIGHT DIRECTION.—Under this head the *Boston Medical and Surgical Journal* has the following excellent remarks:

"In our own practice we are constantly cognizant of cases of malpractice on the part of apothecaries who overstep the bounds of their legitimate business. That a pharmacist occupies a corner store in a crowded locality, and enjoys a local repute as a 'Doctor,' is no reason that he should treat venereal diseases, surgical injuries, and supposed constipation, or prescribe for 'the chiel who is a little ailing,' but may be on the threshold of serious disease. It is true, the patient, who may have but little money in his pocket, gets his advice for the price of the medicine administered, but the remedy is often dearly paid for by aggravation of disease, when a moderate fee to our younger brethren would secure sound advice and a satisfactory cure."

"We cannot help calling the attention of our friends the apothecaries to a sign we have just seen conspicuously posted in the shop of one of their own number. It is not for our sakes alone, but for their own good, that we advise them also to set up as a public notice,—'We are pharmacists, but not physicians; we dispense medicines, but do not prescribe for diseases;' and when they have done so, we trust they will keep to their own legitimate calling, and allow physicians to treat diseases."

DESIRABLE AMITY.—There seems to be in Great Britain, and we believe there is in this country, an excellent understanding between the medical services of the army and navy. The *Medical Press and Circular* of March 8 has the following:—"The *United Service Gazette* understands that the Admiralty have obtained the concurrence of the War Office to the naval medical students' attending the Army Medical School at Netley. There will be very little extension of the present building accommodation necessary; but the staff of professors, which is mainly composed of army medical officers, will be of course augmented, as the extra burden of instructing the naval students would be too great for the existing staff."

Again, in the *British Medical Journal* of March 11, we find that "on the occasion of the funeral of the late Army Assistant Surgeon, Count Wollowicz, the captain commanding H. M. S. *Hector*, in Southampton Water, offered to send a firing-party of marines, as he was aware that no means of paying this last mark of military respect to the deceased existed at Netley. The offer was accepted. Several of the naval officers also attended the funeral."

MORTALITY OF PHILADELPHIA.—The following reports are condensed from the records at the Health Office:

	For the week ending	
	Apr. 29.	May 6.
Consumption	44	34
Other Diseases of Respiratory Organs	35	32
Diseases of Brain and Nervous System	44	35
Diseases of Organs of Circulation	19	23
Diseases of Abdominal Organs	22	26
Zymotic Diseases	28	23
Debility	20	16
Marasmus	8	6
Old Age	8	9
Cancer	3	1
Scrofula	3	0
Tetanus	2	2
Stillborn	9	19
Intemperance	0	1
Casualties	10	5
Unclassifiable	9	10
Unknown	5	6
Totals	269	248
Adults	148	150
Minors	121	98

OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U. S. ARMY, FROM APRIL 19, 1871, TO MAY 4, 1871, INCLUSIVE.

MILLS, MADISON, SURGEON.—By S. O. 86, Headquarters Department of the East, April 26, 1871, assigned to duty as Post-Surgeon at Fort Columbus, N. Y. Harbor.

IRWIN, B. J. D., SURGEON.—By S. O. 77, Headquarters Department of the Missouri, April 27, 1871, assigned to duty at Fort Riley, Kansas, as Post-Surgeon.

STERNBERG, G. M., ASSISTANT-SURGEON.—By S. O. 86, c. s., Headquarters Department of the East, relieved at Fort Columbus, N. Y. Harbor, and to report for duty to the Commanding Officer, Fort Hamilton, N. Y. H.

WINNE, C. K., ASSISTANT-SURGEON.—By S. O. 90, Headquarters Department of Dakota, April 27, 1871, when relieved at Fort Ripley, Minn., by A. A. Surgeon Lord, U.S.A., authorized to avail himself of the leave of absence granted him in S. O. 23, c.s., Headquarters Military Division of the Missouri.

BREWER, JOHN W., ASSISTANT-SURGEON.—By S. O. 68, Headquarters Department of the Missouri, April 15, 1871, assigned to duty at Fort Larned, Kansas.

MIDDLETON, P., ASSISTANT-SURGEON.—By S. O. 86, Headquarters Department of the South, April 20, 1871, assigned to duty at Elizabethtown, Ky., as Post-Surgeon.

MILLER, G. McC., ASSISTANT-SURGEON.—By S. O. 83, Headquarters Department of the South, April 21, 1871, assigned to duty at Montgomery, Ala.